JOURNAL OF THE

AMERICAN INSTITUTE OF ARCHITECTS

Vol. VI SEPTEMBER, 1918 Number 9

CONTENTS

		Page
Frontispiece—Avila.—Walls. From a photograph by E. H. Lowber.		418
Shadows and Straws		419
"Beyond Architecture"	*Leo Stein*	423
The First War Emergency Government Towns. III. Atlantic Heights		427
Early Churches in Spain. II. Avila	*Georgiana Goddard King*	435
War and the Building Industry	*C. H. W.*	443
Notes by the Wayside		444
A Brief Record of Progress in the Government's War Housing Program		445
News Notes		448
Book Reviews		451
Obituary		451
Structural Service Department Special War Service		452

Published Monthly by

THE AMERICAN INSTITUTE OF ARCHITECTS

1159 Mulberry Street, Harrisburg, Pa. The Octagon, Washington, D. C.

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Checks or P. O. orders should be made payable to The Journal of the American Institute of Architects, and mailed to The Octagon, Washington, D. C.

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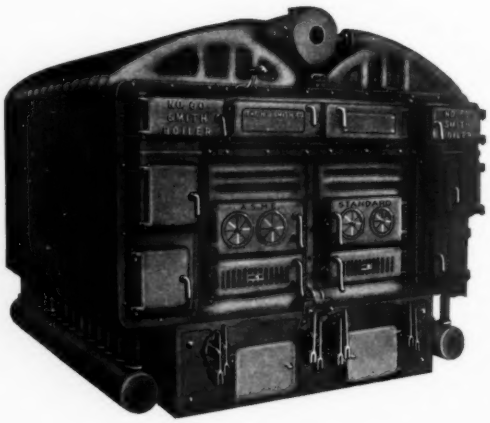

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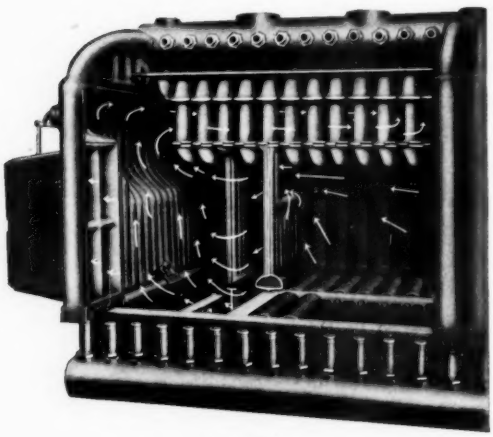

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JOURNAL OF THE
AMERICAN INSTITUTE OF ARCHITECTS

Vol. VI SEPTEMBER, 1918 No. 9

Shadows and Straws

THE MOST IMPORTANT LESSON that Life has to teach is the difference between What and How. Slow and painful is the learning of it, and yet one dares to say that never before has the world been so intent upon that study. Failure to learn it has cost man so much through all the ages, and yet we hardly dare hope that out of this war there will come a full knowledge such as will save us from future costly failures. But we shall take a great step, perhaps the greatest step that mankind has ever taken, for in many things the world will have learned that How to do anything is of little value until you have first found out What is the thing to do.

THE WORLD IS FULL of men who can tell us How to do almost anything. But, in comparison, we may say that the world is almost empty of men who can tell us What to do. That is the essential difference between great men and small. And yet there are so many men who pass for great by reason of the magnitude of their achievements that it is small wonder the world is deceived. Too late it finds out that they were only How men, after all, and that a What man must be summoned to undo the mischief done. The really great man is the man who knows What is the best thing to do, not for the moment, or the immediate profit, or the expedient compromise, but the thing which is best to do as seen from its total results. In finding this difference between What and How there lies the secret to the peace of the world! If nations only knew What to do and spent their effort in that direction instead of feverishly following in the devious and haphazard path of first one How and then another, think what that would mean as a beginning!

SUPPOSE THAT INSTEAD OF a blind, hit-or-miss, happy-go-lucky, devil-take-the-hindmost arrangement for conducting the affairs of the world, that we had a plan—a world plan! No such thing has ever been thought of, and yet it is toward the preparation of such a plan that destiny is driving us with relentless strokes. We, in our selfish concerns as individuals, as communities, as states, as nations, have never even thought of such a thing. Indeed, it is only on the smallest scale that we have ever done any planning at all in the sense of ordering our physical development. Town-planning has sprung into existence,—really it has been resurrected from the past,—but up to the present it has hardly served as more than a peg on which a few men may hang their signs. As an infant science, still in its swaddling clothes, it has only the possibility of indicating a very few of the things which go into the making of a plan. It is limited by the traditions out of which it was born, and still more limited by its inability to fit its little plans into a larger plan. Yet the greatest thing which hampers its development as a genuine science and a profession is the unwillingness of men to believe in a plan.

But the very fact that many towns and cities have endeavored conscientiously to have a plan made by which they could wisely regulate their physical growth, shows clearly that those communities have grasped the necessity of knowing What to do. For years they have sat idly by watching each other show How to do things. The result is such an appalling disorder that

every community that possesses the vestige of a conscience shudders in dismay when it can be made to see itself in the mirror. And in the new anxiety born of that shudder it turns naturally to the man who can tell it What to do. It forgets the problem of How, for the moment, and thus What comes into its rightful place and How follows on behind.

Let Us Not Seem to be unduly hard on the How men. They are vitally necessary to the world. We could not get on without them. They follow after the What men like the perfect complement they are—but do not forget that they follow. So long has the world been caught with the glamor of How things are done that it has quite lost interest in finding out What things to do, as a guide to its actions. It has rather preferred to give, under the guise of freedom, a *carte blanche* permission to the How men to do as they liked. It has blindly followed them as leaders. As a result, we have grown up with no plan whatever. Each man has been for himself—for which he is in no sense to blame since that is the manner in which he has been ordered to live—and the more magnitudinous, the more daring, the more costly have been the schemes and the works of the How men, the more we have applauded. It is not so long a time since the name Krupp was almost a symbol of the highest attainment in the How system of haphazardness. England worshipped its Armstrong and its Vickers, while we struggled along rendering homage to some lesser lights. Now, in the fearful ordeal through which we must pass, we utter the fervent hope that this is to be the last war and that the peace which is to come out of it will be founded upon something far more enduring than treaties, or diplomatic arrangements, or incessant racing for the goal of might and power. But there can be no answer to any of our hopes in these directions until we shall have joined together as men of all lands and climes and agreed upon a plan by which the peaceful development of the world shall be ordered, and under which there shall be justice and fair play for the last toiler and the lowliest human beings. The Plan of that Destiny which takes cognizance of all things will some day prevail.

Before We Get Through with the war, indeed, we shall have learned that the greatest fundamental is a plan. If one tries to define the difference between What and How in words, one might very safely fall back on the single word "plan." One of the ablest minds in all the professions has said that the difference between What and How is the difference between the profession of architecture and the profession of engineering. It is the function of the architect to tell his client first of all What to do. No matter how rarely he is permitted fully to perform that function, nor how few are the successes which he attains, his profession stands primarily as one which deals with What to do. Too often he is given no latitude for advice; too often he is called in after the first mistake has already spoiled his opportunity for full service; too often he must make the best of physical conditions where What to do leaves little room for his ability; and far too often he comes to this first essential of his task with an incomplete equipment. But architecture still stands as the science which seeks to answer its problem by finding out What is the best and the right thing to do. After that decision has been taken, the question of How to do it becomes easy of solution. Unless that question is answered first, all the labor of the men who know How will have been thrown away and the whole undertaking will come to naught. It might truthfully be said that the test of an architect's service would be the number of years during which his work endured and rendered useful and economical service. All things decay in time and, under the impetus of modern progress, many often lose their usefulness even before physical decay sets in. It is the man who can see farthest into the future of all the forces which will act and react upon the work he proposes to do who will best answer the problem of What to do.

Ah! the failures that occur in all our undertakings—political, social, and, above all, in the feverish activities through which we build in terms of size and extent that stagger the imagination. The failures seem endless and the successes few, as we seek to evaluate our work in terms of a fuller life for all men. The history of the world since time began seems to be the story of man searching the earth and the heavens for one who could tell him What to do. If we would chide him because his search is spasmodic, because he only seeks the What to do after the How to do it has failed and brought him only

trouble or anguish of heart so deep that it seems beyond his power to bear it, we must remember that he is, after all, only human. The Divine Plan which he tries to grasp in his trouble does not yet seem to suit his everyday life, and so, like the child that he is, he rebels and is punished. Thus it is not at all surprising that communities, states, and nations pursue the same path. They are far less sensitive than the individual man. Their needs to know What to do are governed less rigorously than are his. They are more immune to pain, and the trouble which finally brings them to face the disease they have allowed to grow into their life takes longer to make itself seen and felt. As a whole, they look little ahead, and are quite content to see How things are done without caring much about What are the things to do.

In war, everything changes. We may begin by asking ourselves How we shall defeat Germany, but we shall end by asking, "What is the plan by which we shall conquer?" for without a plan we are lost.

The Longer the War Lasts the truer we shall find this to be, and we shall become more and more critical of the plan as time goes on. It is not within our province here to discuss that plan in detail, for it is a colossal plan and not yet wholly matured. We have already noted what the How men have done to our aëroplane necessities, and their blunders in other ways have been costly and dangerous. But is it too much to expect that as our whole plan unfolds itself more completely; as we become more and more accustomed to a degree of regulation which would in ordinary times seem intolerable; as we begin to understand that both victory and the price we shall have to pay for that victory will depend upon how skillfully and loyally we, as individuals, fit ourselves into the plan, we shall realize the value of knowing What to do?

Shall we not also be given to see that just as we could not escape being drawn into a war, although three thousand miles of ocean rolled between us and an enemy who covertly sought our life, our plan for victory must also fit itself into a still larger plan? Just as our army must fit itself into the plan of General Foch, so must our consumption of food be based upon world-supply, and world-needs. Everything that we produce and consume must be studied in its relation to the production and consumption of the world.

Think what this means! Surveyed in its entirety, it indicates the first attempt the world has ever made to plan for a method of production and consumption founded on the idea of wise conservation and not based upon some petty scheme for taking a grand profit, never mind what the result was to the world at large, —not even if that result meant that nations must be plunged in war in order that the profit might be taken or kept. We are making a world-plan for war, yet for peace the world has no plan. It has never bothered itself with thinking about a plan. It has even taken the ground that there was no place in the world for certain people, and that nations might kill them off if they were in the way. We have only to think of the Armenians, of the Jews in Russia, of the Chinese in Manchuria, of the rubber-gatherers of the Orinoco and of the Congo, not to mention the toll taken by industry in the world every year.

But all our labors for peace will go for nothing until we can determine What to do for the world. The German problem will no sooner be solved than we shall have fresh problems on our hands. What, just to look for a moment at one of the many questions we must face, will be our answer to Japan, whose incredible increase in population indicates a fast-approaching day when her tiny island area will no longer contain her people? What will be the thing to do? There must be a plan—and the world must make the right one, or else we shall sow the seed and reap the whirlwind, by allowing the problem to answer itself.

A World-Plan! How visionary! How fantastic! And yet it is the thing toward which we are working, postpone it as we may, and the only basis upon which a genuine democracy can come into existence. But in order to make a world-plan, we must first have a national plan. No such thing exists in any country, except in the most fragmentary form. As a result, every country is planned and arranged by men who know How to do things and care nothing about What to do. The regional surveys which have already been noted in these columns are indications of the need for planning on a larger scale than ever before. It is not only town-plans and

city-plans that we find we need, but plans which will enable us to know What to do in relation to an ever-widening circle of human interests and activities. The ripples of our human contact are spreading faster than we dream, and we can never again seek that solitary way which Washington pictured as freedom from entangling alliances. We are forevermore a part of the world, and we must prepare to play that part.

All things are today claiming their relationship to each other. That is the wonderful effect of war. Today, in the heat of the struggle, we cannot estimate what our ineffectiveness, through lack of having our nation planned wisely and for the common good, will cost us in either lives or in money. Tomorrow, after the struggle is over, we shall be able to approximate that cost, and then we must either resolve to continue and enlarge the present plan which is growing out of our unparalleled effort to mobilize our resources, to save and conserve and render efficient toward a common end, or else we must go back to the old hit-or-miss method. Shall we choose this or shall we choose to adopt the method of a nation-plan which shall seek rightly to fit into a world-plan?

THINKING UPON THESE THINGS, one might well ask where the profession of architecture fitted in to the essential fundamental of knowing What to do, but the truth is that architects have concerned themselves too little with this question, in its relationship to the whole problem of our physical development. Perhaps it would not have been possible for architects greatly to have changed the disordered method of community growth to one where location and arrangement of streets, buildings, and factories was governed by a decision based on study of What to do. But a certain price has been, and will continue to be, exacted of them for the failure, let the fault lie where it may, for there is a well-defined relation in the public mind between the architect and physical growth as expressed in buildings. Protest this as we may and charge the public with inappreciation as we will, it is too much to think that the profession as a whole has not been measured and gauged, in this respect, after all these years.

But the world will make new demands after the war, and how shall we prepare ourselves to meet them? In what form will they come?

THE PROFESSION OF ARCHITECTURE has been much discussed since our entrance into the war, and most of the discussions have been based upon an erroneous assumption of facts, while the remedies suggested covered the whole field of the *materia medica* of business. They varied between pretentious schemes for advertising and those whereunder the architect should become the contractor as well, thereby eliminating professionalism entirely. Therefore it must be obvious that there are as many minds on the subject as there is a general and profound failure to envisage all the factors which enter into the approach to the problem of the future of the architectural profession.

It is for that reason that the new Committee on War and Post-War Problems, of the American Institute of Architects, will be called upon to undertake perhaps the most serious task which has ever fallen to an Institute group. Although the Committee is of the Institute, it will engage upon its work in the name of the whole profession of architecture in this country. It will enter into correspondence, and very likely into much closer relations, with architectural societies throughout the world. It will attempt to approach its problem not by seeking How to accomplish a plan by which architects may make the most money, but by seeking What are the things to do by which the profession of architecture may become a great and universal human service. Too long has it remained a luxury of the few!

In the October number of the Journal we shall publish the personnel of this Committee, together with the preliminary outline of its program. These matters are now receiving the final consideration of the Board of Directors. In continuing numbers of the Journal there will be developed an analysis of the profession itself, of the Institute's relation to the profession, and of the relation of both to the problem of building and to the even greater problem of a new and changed relation which will undoubtedly come out of the war. But as the title of the Committee indicates, it will deal with war problems as well as with post-war problems. Out of this study of present and future, of fact and surmise, the Institute may render a contribution worthy of the ideals for which it stands.

"Beyond Architecture"

By LEO STEIN

MR. A. Kingsley Porter's book, "Beyond Architecture," contains one chapter of quite unusual interest. It is entitled *"Paper Architecture," and traces in a summary, though stimulating manner, the consequences for architecture of the use of paper instead of parchment. He shows how, in the Middle Ages, when parchment was the scarce and unadaptable writing material, there was no method of drawing practicable for the master mason, except freehand drawing. It was not possible, either, to work with instruments of precision or to make elaborate studies of details. In consequence, the master had to be in closest contact with the building, and the workman had to exercise no small initiative. The use of paper gave to the directing mind a progressively greater control over the work in all its features, subordinating the worker and, at the same time, separating the chief from the actual processes of building. Facility in the use of instruments led to mechanical precision in direction, and to equally mechanical precision in carrying out what had been directed. In this way the artist's contact, on the part both of the architect and the craftsman, was lost, with the consequences that we see everywhere about us. This tendency began with the Renaissance and grew gradually more pronounced with the dying out of the old traditions of the crafts and the continuously greater intrusion of machinery and machine-like precision. Of course, many things coöperated with the use of drawing-paper to bring about this result, though it is also true that hardly anything in our modern civilization has been unaffected by the increased use of paper in some form. In any case, it is eminently worth while to have brought into relief the specific consequences for an art of the use of a specific medium, for no type of discussion throws a more far-reaching light upon its course. This chapter on "Paper Architecture," however, stands rather by itself, and the others, which form, though apparently without premeditation, parts of a coherent argument, demand discussion.

Mr. Porter is with warrant a devotee of the Middle Ages. He recognizes fully to how great an extent that period was distinctively a period of artistic achievement and how, with the Renaissance, began a new era in which science played a part that tended progressively to become more and more nearly the whole. Unfortunately, Mr. Porter neither understands nor appreciates science, and recognizes in it nothing except its utilitarian aspects. He does not even recognize the distinctive character of medieval science, and is apparently quite blind to its problems. He is at his best when he seeks to set forth the virtues of the medieval mind in its esthetic expression, and he invariably falls down when he leaves this congenial theme. He recognizes how completely art was for the Middle Ages a satisfactory form of statement and gives abundant detailed instances to show this. He sets forth amply the inherent logic of medieval art, and is enthusiastic in his admiring exposition of it, but, unfortunately, his inability to understand either the purposes or the accomplishments of science makes everything except his art appreciation rather futile. His antithesis of the medieval and the modern is essentially false because he does not understand the fundamental nature of the difference, although he recognizes and insists upon the fact of difference. It is unfortunate that he should presume so greatly beyond his proper theme.

Mr. Porter's ignorance of philosophy and science makes his discussion of the intellectuality of the Middle Ages, a theme on which he insists enormously, quite utterly absurd. He finds, in their practice of dialectic, evidence of their exuberant "delight in intellectuality for its own sake." Of course there was a great deal of mere disputation but those terribly earnest persons, from Erigena to William of Ockham, Roscellinus, Abelard, Albertus Magnus, Thomas Aquinus, and the rest would have been less than flattered by such an estimate of their activities. They were, of course, engaged in problems that seemed to them of the most immediate and the most practical importance and were employing for their solution the dialectic, as the only scientific method at their command. Porter,

*Published in the Journal, May, 1918.

in his disparagement of the modern mind, makes a particular point of its neglect of dialectic, entirely ignoring the fact that this has been abandoned because of its sterility as a method of discovering truth. He finds that "we moderns are eminently lazy, and our speculation has primarily a practical and utilitarian scope. . . . If we wrestle with an intellectual problem it is that thereby we may attain some material end." Passages like this are numerous and could be disregarded if the author did not take them seriously as part of his discussion of the problems that modern art presents. But an instance like his comparison of the logic of the gothic vaulting and the illogic of Michelangelo's dome will show how failure to understand these matters leads him quite astray concerning things that are of the essence and not of the accidents of the book.

He tells us that the medieval builders "experimented until they discovered how much was necessary to support the weight of the vaults," when the important thing, from which they derived enormous advantage, was that they did nothing of the kind. They had no means of experimenting otherwise than through actual building, and so their method was really that of trial and error. When a vault fell in, they discovered its weak points and were enabled to correct them next time. When a vault bulged, they learned where it was necessary to apply a counter-thrust. Thus they built up their system by the effective logic of experience and not of calculation. But Michelangelo was in different case. His dome was a *tour de force* based on no extended series of preliminary trials. Neither did he have the experimental material and the mechanical science that would have enabled him to calculate the proper placing of the ribs. He tried to think out a difficult problem all at once and could not do it satisfactorily, whereas the logic of the gothic builders had the effective warrant of its actual working. This, and not their intellectual superiority, gave them their advantage, and they had many others which Porter fully recognizes, though he fails to see how they affect the whole problem of modern art. To this theme I wish to devote a few words. Why was the period of the Middle Ages the period of esthetic achievement *par excellence*, and why has there been since then a more or less continuous degradation? Why is it that modern science is, in its tendencies, antagonistic to art? The Middle Ages, too, were interested in nature and in thought, and yet their studies, though carried out as earnestly and with as little reference to artistic utilization as those of modern times, were perfectly compatible with progress in the arts. Why was it so?

The difference between dialectic as a scientific method and experimental science, is that dialectic accepts its data while experimental science investigates them. It happens that there is a tendency in the human mind to create symbols and to elaborate these symbols into myths, and these symbols and the myths in which their actions were elaborated, assumed, for the medieval mind, the validity of fact. The innumerable forms that clustered on the churches and civic buildings, and whose stories were illustrated in picture and relief, and told in popular recitation, or collected into books of so-called history, sacred, profane or natural, had a kind of reality for all, though different grades of intelligence might give them different refinements of interpretation. They were essentially facts to be dealt with and to be elaborated, and even those who didn't believe in them literally considered them as valid counters and true symbols. They served as a pictorial language which was generally understood to some extent, and quite fully understood by many.

The tendency of critical science is to break up popular symbols, to destroy the illusion of their authenticity, and to leave them, in so far as it leaves them at all, as mere conventions. Therefore, in a scientific age, and progressively more so as science develops, we are reduced to actual natural fact as the only common language of form. It becomes therefore the only genuinely acceptable language of form, and the old symbols, as well as those which are at times invented out of hand, come to have only the validity of fancy. All that ancient credulity had available, in its plastic creations, has been lost to us as a means of genuine utterance.

Another activity of science has been deleterious, in an almost equal degree, to architecture. I spoke above of the absurdity of attributing to the medieval builders experimental methods instead of methods of trial and error. They and the ancients knew nothing of the strength of

materials and the power of thrusts, except as they learned them in the processes of building. No new construction could be invented all at once but had to be developed on the basis of actual experience. Therefore there was a genuine growth of architectural forms that had in them an inner evolution. Everywhere there was continuity—an onward movement till the perfect balance was established, and then, degeneration as the need for change led to wanton elaboration and excess. Today our knowledge and our command of mechanics frees us from all restraint, and we can invent a new kind of building out of hand and make it work. This is all to the good for engineering but fatal to architecture as it has been understood in the past. Today science is real, and art is rather an arbitrary invention. Unquestionably we still want it. We insist upon its importance and try to resurrect it, more or less, upon the old terms. Our success is not very conspicuous, and the result is something of an artifact. We are rather trying to create than following a necessity in creation. We continually revert to former ideals in order to have any ideals at all. Antiquarianism is the pathway of our escape from science. We assume, in general, that it is the only way.

Porter takes it for granted in the concluding chapter of his book, in which he discusses the future of art, that there must be a turning back to the ages of art, that the artistic degeneration which has been so marked in many fields during the nineteenth century must be arrested. "A dam must be built," he says, and "the only serious divergence of opinion has been as to how high the cross wall should be raised. . . . But it is only a question of degree. Upon the fundamental issue of backing up there is universal agreement. The dam is the training of artists." And then he goes on to say that the public, too, must be trained by museums, courses of study, and so on.

This notion of going back to something or other has great fascination for minds that find their ideals realized at some time in the past. Philosophers arise with their slogans of back to Kant or Plato or Aristotle, as the case may be; religious leaders are continually backing up; even statesmen and economists are urgent for revivals; and in art it is a commonplace. The extremest position is that of those who would go back of our whole civilization and return to nature. The notion of the return seems to offer chances for a fresh departure and for new conquests, as it apparently supplies conditions for combining the new and the old. "*Si la jeunesse savait.*" But the impossibility is the same. Porter in one and the same volume protests against the restoration of the gothic monuments ruined in the war and advocates the restoration of the modern arts by recourse to the Middle Ages. Not, of course, that he means that there is to be imitation of old models, but rather fecundation of the new. The old order is somehow to inject its saving virus into the rank new order, or rather disorder, and so reform it all together. It seems practicable but, really, it is not and for good reason.

According to old notions, man was a producer rather than a product. Of course, it was always recognized that he was conditioned by his environment, but, none the less, the insistence was always upon his capacity to alter that environment in accordance with his determined purposes, rather than to consider him and his environment as so complexly interrelated that the element of his determination by it was quite as important as the reverse. Therefore there was always great hope entertained of the value of education in producing effects of an immediate kind. Of course, I do not mean immediate in time, but in consequences. Today, among the scientifically minded, these expectations are no longer entertained. We know now that even the products of man himself bring about changes that he is unable to deny. There is no essential distinction between art and nature, for everything that happens becomes a part of the natural order. It may be undesirable and destructive, as many things in nature are, but in order to overcome it we must go on beyond it, for we cannot go back of it. The Wordsworths and Tolstoys and all the others who felt that the burden of this unintelligible and undesirable complex civilization should be thrown over and make way for the return to a simpler order, richer in spiritual possibilities, were making this distinction between the natural and the unnatural. They assumed that something could be sloughed off—the portion that was bad—and leave the basal good to become the root for a more desirable growth. The notion advocated by Porter, of profit to art from education regarding what is

good and bad in art, has underlying it a similar fallacy, because it also assumes that what is prejudicial is the result of error and is susceptible of removal by the judicious application of remedial measures.

The facts are otherwise. We have seen, in recent years, the kind of results that culture can bring about. There has been noticeable, in our time, a distinct improvement in taste in building, dress, and furnishings. Our rich men buy better pictures and build better houses. Summer dwellings have a grace and charm that they had lacked for many years. Hangings and wall papers and innumerable other things are improved, and yet, in spite of all this, creative activity in the arts is conspicuously sterile of significant products. Taste, which is all that education can provide, is entirely different from creation. We can take direct measures to provide the one, whereas we can take no direct measures, perhaps no measures at all, to provide the other.

It is entirely within the reach of possibilities that our scientific civilization will never again afford us a period of art that is in any way comparable with the Middle Ages. It may be that we will have to be satisfied with landscape gardening, decoration, music, and minor poetry. Architecture may become engineering decoratively and spacially adapted. Some things seem quite certain, as, for instance, that painting and sculpture, whether apart and still more in relation to architecture, can never come to much until craftsmanship is born again. But the rebirth of craftsmanship depends on social conditions and cannot possibly come about until the war between capital and labor, which brings with it the spirit of sabotage, has come to an end. Perhaps the essential difference between art and manufacture is that art is a stimulus in the whole process of its production, even if the thing made is of the simplest and the most utilitarian kind, whereas manufacture is something made with a stimulus entirely from the outside. It does not follow that even craftsmanship will restore great art, but certainly it will provide the conditions for a more general production of something artistically valuable.

It is generally assumed that a civilization that does not produce great works of art must necessarily be inferior, but this is not at all obvious. It is one of those conclusions drawn from the past without a felt necessity for critical examination. We are so accustomed to pointing to monuments of architecture, sculpture, painting, music, and poetry, which are all the actual survival of former eras, and to say "all else is transitory, only art survives," that we ignore the fact that what is really important for any epoch is the sum total of vital and interesting experience in it, and not particularly that portion of the experience which happens to have qualities of self-immortalization. To the vital interests of any period, great art contributes relatively little. The current cant to which almost all, even those who neither know nor care about great art, give their adhesion, enormously exaggerates its importance. Everybody needs art, but there are very few who need it in its greatest forms. Most people, even of the better kind, take this in very moderate doses and can easily be distracted from it by something that is a little more exciting. Today, in this era of automobiles, Boy Scouts, and, in general, out-of-door ideals, the world of nature replaces greatly the world of art. It supplies a continuously greater part of people's great sensations. Gardens, parks, and national reservations are going on to play a continuously more important part in people's lives, and art, except the genus minor poetry, which, whether done with brush or pen, is essentially the personal, individual note, may very well dwindle in the future from lack of impulse for ambitious creation. This would not necessarily mean an inferior civilization. It would mean a different one. Art is for man and not man for art. Only a few score people or less are doing at any time the thing that counts for the future, and the time may come when a more general joy in all kinds of activity may be looked on as vastly more characteristic of a fortunate moment in history than the production of some things whose beauty interests a subsequent generation. The so-called "fine" arts may play a relatively small part then. Such a thing is quite conceivable. Art may become, in time, less a means of "expression" and more the means for the creation of a desirable environment. Of course, I am not prophesying. But if we are to recognize the possibilities of the future we must be prepared to scrap our conceptions that are based upon an uncritical study of the past.

ATLANTIC HEIGHTS.—VIEW OF KEARSARGE AND PREBLE STREETS FROM CRESCENT WAY

The First War Emergency Government Towns

III. ATLANTIC HEIGHTS

Site

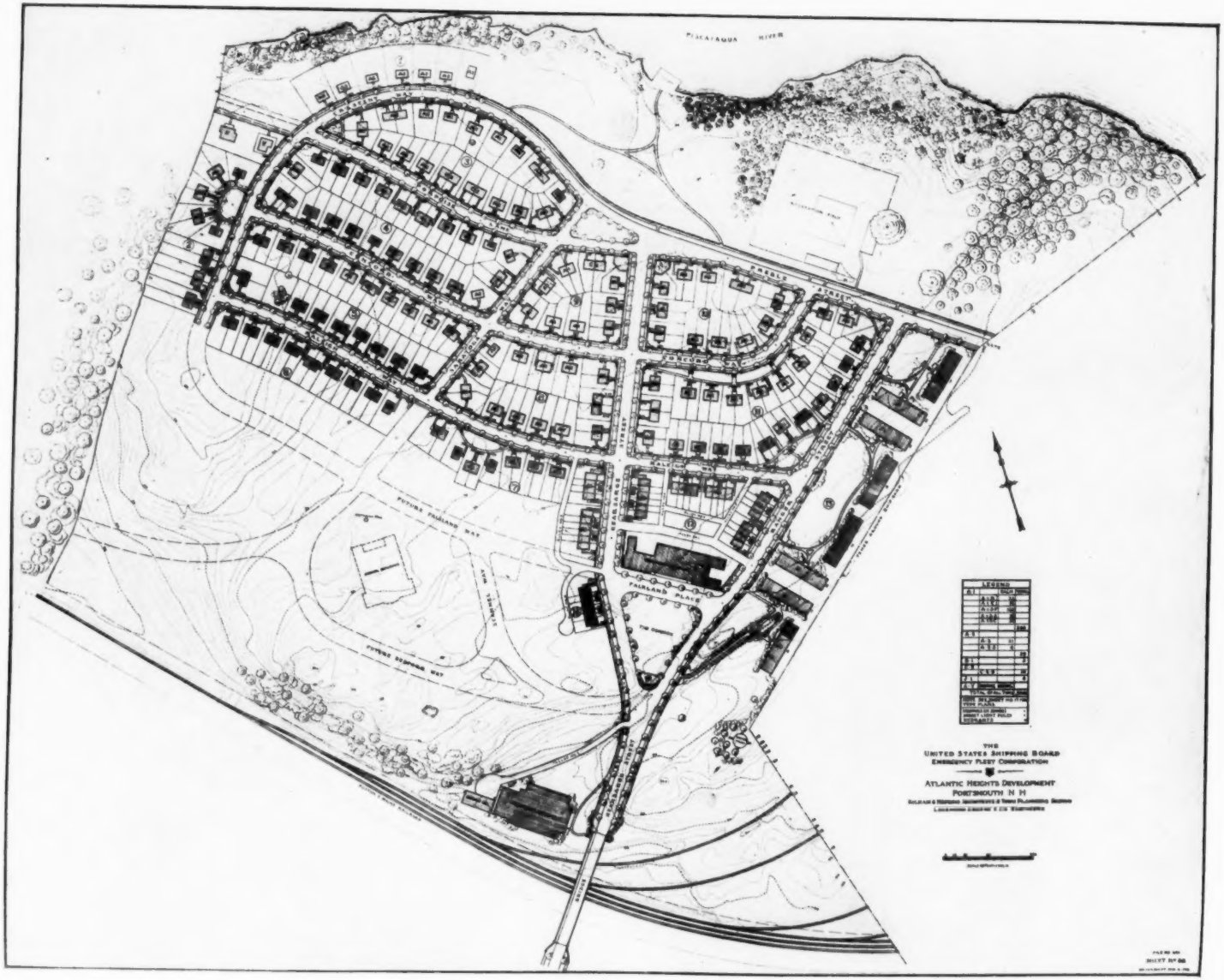
THE Atlantic Corporation is building ships on the Piscataqua River at Freeman's Point, just above the city of Portsmouth, N. H., and so within easy and safe distance of the sea. The extensive works of a defunct paper mill have been adapted to the needs of shipbuilding, the central structure of which rises in somewhat gaunt picturesqueness and contributes the note of industry, with its echo of war, to a wholly beautiful and thoroughly New England landscape. Happily, this note of gauntness will in some measure be relieved by the new community now being built to furnish homes to the workers in the shipyard.

The site of this community is some sixty acres of ledgy, undulating land, which, rising abruptly from the Piscataqua, stretches back in a continually rising slope. Westward, the river winds in a broad curve with the New Hampshire hills blue in the far distance. Northward rises the domelike top of Agamenticus, in Maine, with a foreground of farm and forest. No fairer spot exists upon which to found a community, and at sight of this carefully thought out plan upon which such rapid progress is now being made, one pauses to wonder whether these war-time activities of the Government may not at last teach us a hard-learned lesson, in so far as the building of houses is concerned.

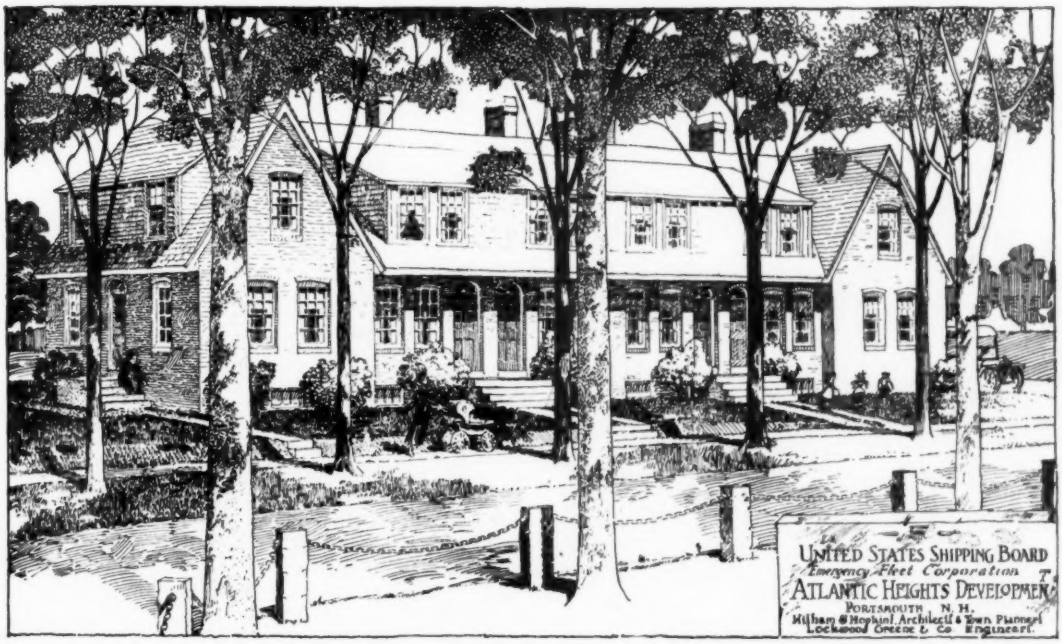
Atlantic Heights—so runs the name—lies about a mile from the railway station of Portsmouth, N. H. Ships once came up the river and landed (or received) cargoes at a wharf which had long ago fallen into disuse and become well-nigh forgotten. Today the wharf has been revived and has contributed not a little to the quick and cheap deliveries of materials.

A clump of trees stands guard at the west, somewhat obscuring the view, but a fortunate grove of pines on the other side gives promise of recreational facilities and a playground. Ledges outcrop at irregular intervals and offer opportunities for picturesque variations in plan which the architects have been quick to seize.

The three points which were the determining factors of the town plan were: First, the best location for the approach bridge which spans the valley (between Portsmouth and Atlantic Heights) through which the railroad runs; second, a natural transverse depression or swale which would carry the drainage sewer for most of the tract; and, third, a picturesque cove, with the old wharf, which provides the only landing-place on the river-bank.



ATLANTIC HEIGHTS.—PLAN


UNITED STATES SHIPPING BOARD
Emergency Fleet Corporation
ATLANTIC HEIGHTS DEVELOPMENT
PORTSMOUTH N. H.
Hillam & Hopkins Architects & Town Planners
Lockwood Greene & Co Engineers

ATLANTIC HEIGHTS.—GROUP OF SIX HOUSES

Accordingly, Kearsarge Street, the main throughfare, (incidentally the streets are all named for United States war vessels built in Portsmouth mostly during the periods of the Revolution and the War of 1812), starts from the site determined by Nature for the bridge and heads across for the cove about midway of the village site. Saratoga Street follows the natural drainage valley and joins Kearsarge at a point which affords a striking view over the river and the charming Maine country beyond; while Ranger Street, named for John Paul Jones' old ship, diverges diagonally from Kearsarge Street just at the bridge, leaving between the two streets a typical New England triangular town common; not a plaza or square, but like everything else in Atlantic Heights this little common "just happens" easily and naturally, fitting the contours of the land as if a drawing-board had never interposed between its creator's brain and the contractors' workmen.

The angle of Ranger Street is determined by the line of the shipyard fence, and along this line, nearest the gate, are placed the eight dormitories containing single rooms for 50 men each. These eight buildings are arranged with ample park spaces between and separating the houses from the factory plant. They are already completed and partially occupied.

Kearsarge and Saratoga streets have another objective than a view, for just south of the cove is the beautiful stand of pines, right on the rocky bluff. Together with an adjoining level tract, it is reserved for a park and for the recreation fields to which we have referred. The other streets are located with special reference to the contours of the land. Crescent Way, which, though named for a Revolutionary ship, is actually in the form of a crescent, sweeps around the edge of the bluff with charming views of the deep Piscataqua and distant countryside. On this thoroughfare several sites have been reserved for possible future houses of a somewhat higher cost than the rest, which might be needed for foremen and superintendents.

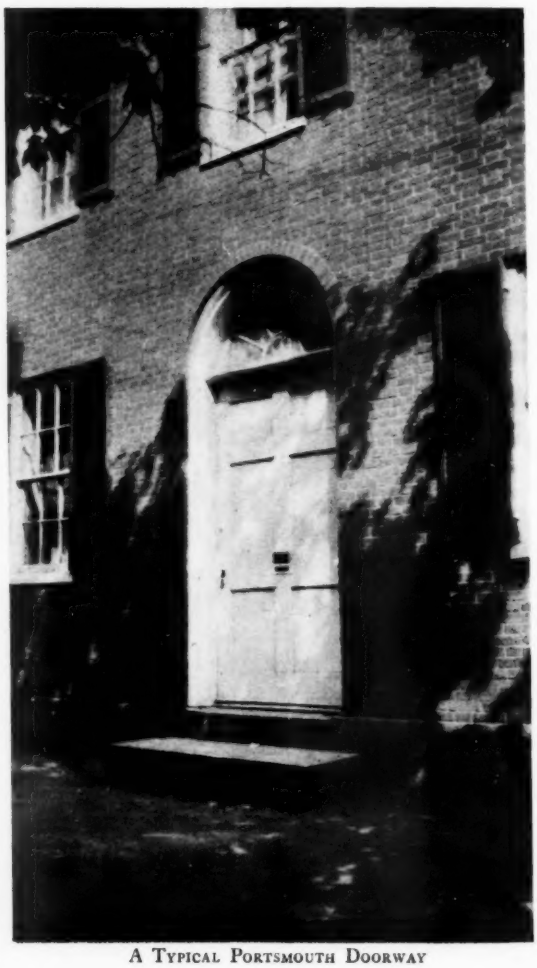
If critics should say that the town-plan of Atlantic Heights lacks balance and that technique which is typical of the town-planner's work, the architects would be able to reply with the truthful rejoinder that the topography of the site did not permit a street-plan of the drawing-board type; an informal plan was obligatory. Moreover, the architects were wise

ATLANTIC HEIGHTS.—ALONG THE PISCATAQUA

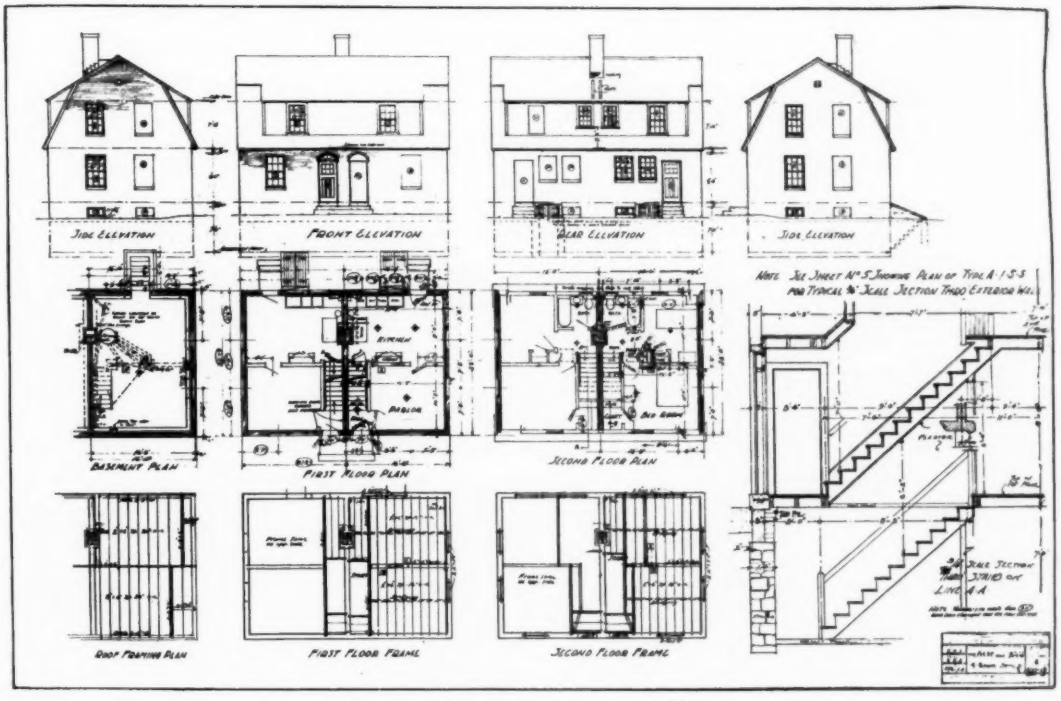
enough to realize that the spirit of the community should be kept in consonance with that of old New England; thus the curving roadways and irregular blocks perpetuate the tradition of the old eastern seaports. Probably they would not have attempted actually to create a second Marblehead, but in several places where outcropping ledges border the streets the houses have been set back on the upper levels and the sidewalks carried up over the ledges, sometimes with steps; in the pockets of soil there will be planted running vines to creep over the rocks, and shrubs to break the bareness. Wherever attractive clumps of trees occur they have been reserved for small parks, which will diversify the perspectives and provide shady playgrounds, and it is this easy naturalness and absence of sophistication which will be first among the charms of Atlantic Heights.

Kearsarge, Ranger, and Preble streets are 50 feet wide; all the others are 40 feet in width. The lots are generally 100 feet deep, and, as Atlantic Heights is practically free from row houses, there are only one or two alleys. A space for shops and community buildings is reserved, fronting the Common, but at this writing the character of these buildings has not been definitely determined. A school has been projected and will be located on an extension of Saratoga Street, on an elevated and sightly location, while the cafeteria is to be placed just below the bridge, convenient to the shipyard gate as well as to the village.

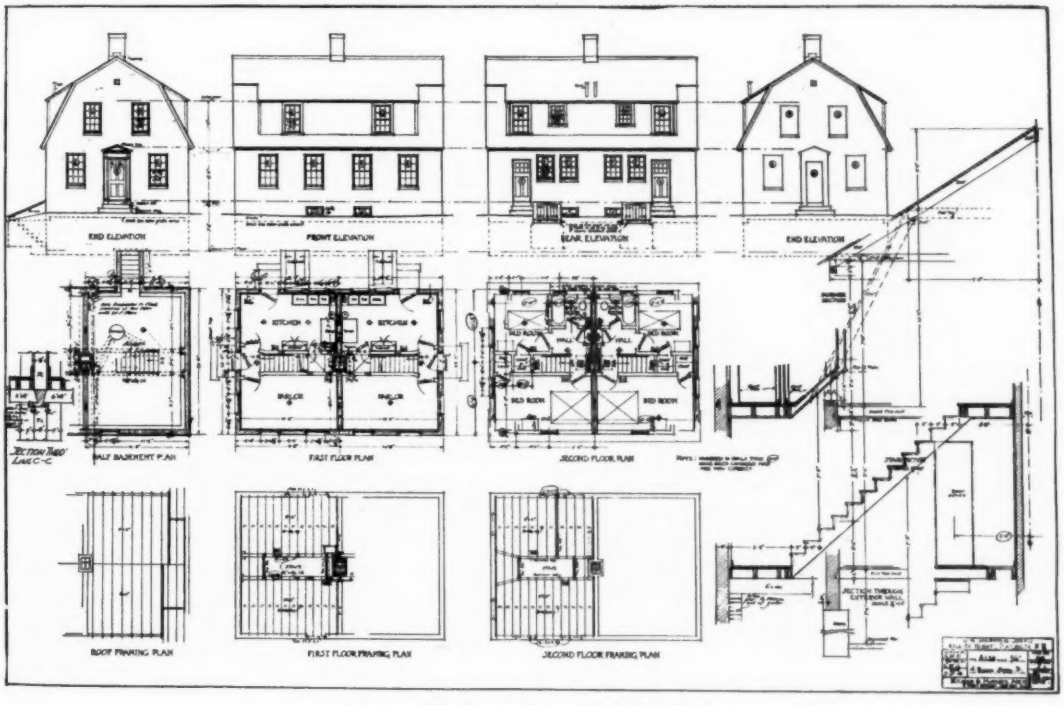
Such are the physical features of the project.



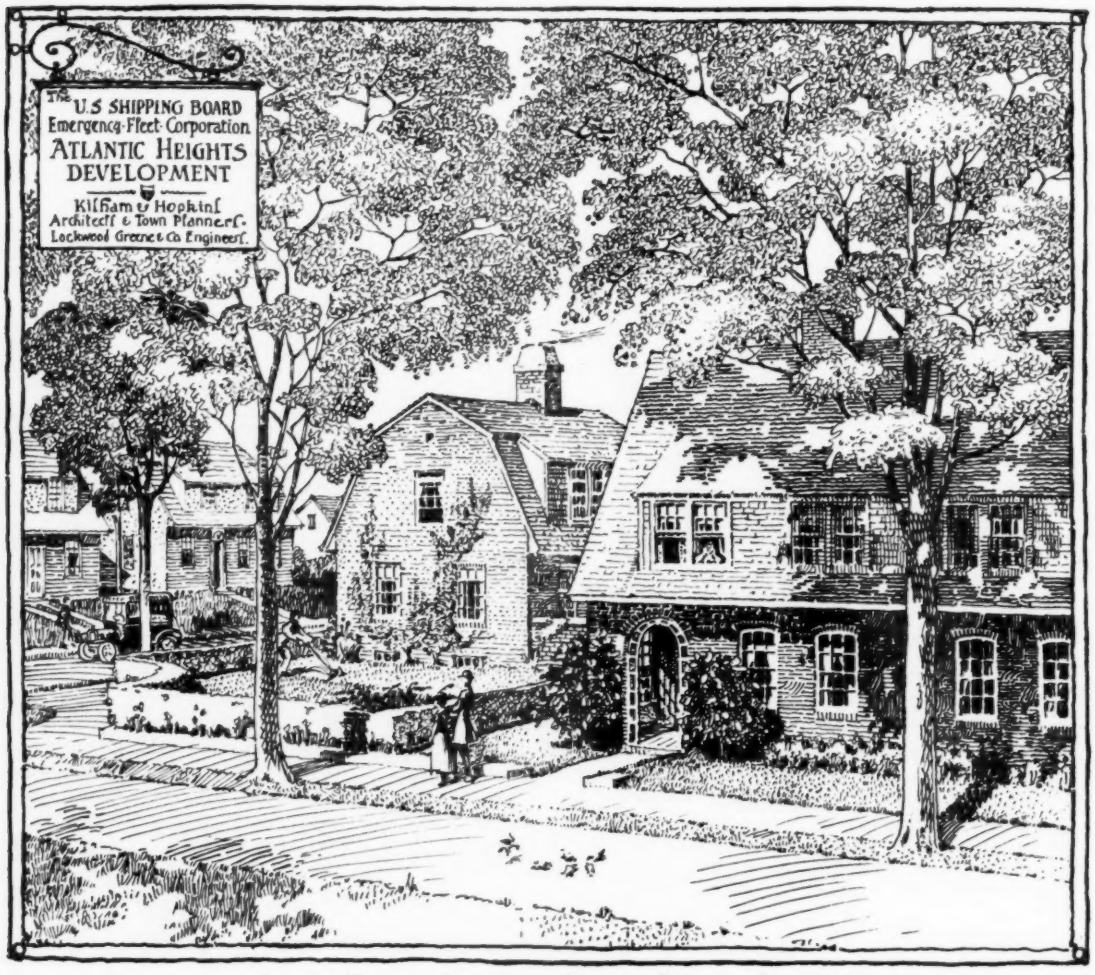
A TYPICAL PORTSMOUTH DOORWAY



ATLANTIC HEIGHTS.—SEMI-DETACHED HOUSE



ATLANTIC HEIGHTS.—SEMI-DETACHED HOUSE



Atlantic Heights.—Showing the Proposed Effect of Planting

Water will be supplied from the Portsmouth system, augmented by a booster pump and a tank which the architects hope to be able to screen with poplars. The sewage goes overboard into the swiftly flowing tidal river. Electricity comes from Portsmouth. Gas will not be introduced on account of the expense.

The total developed area for houses and dormitories is 30 acres, of which 9 acres are occupied by streets. There are, therefore, ten houses to the gross acre, or fourteen if the space occupied by streets is excluded.

Houses

The houses are nearly all built of brick, a very few frame houses being introduced by way of variety. These will be built last in order to use up and save all lumber which might otherwise be wasted. Some of the houses are single, of four and five rooms and bath, but the vast majority are semi-detached, of four rooms and bath, with a few rows of four and six houses. Several different types of plan are used, and the roofs, which are mostly of the gambrel type, are varied by gables, but the observer will probably consider them as very much alike. This similarity was intentional, since the architects confess to having aimed for restfulness rather than variety. All the houses are heated by furnaces, and all are supplied with coal-ranges, electric lights, baths, sinks and wash-trays. Porches are not very plentiful on account of cost. The

Atlantic Heights.—View of Raleigh Way

doorways show considerable variation, all the designs being studied from old Colonial types in Portsmouth. There are 300 houses and dormitory accommodation for 400 single men.

Provision for the very necessary boarding-house is made by arranging a goodly number of four-room, semi-detached houses so that a door can be cut in the party wall, allowing an extra four rooms and bath to be added to the household which wishes to take boarders, whose rooms will be well separated from the family quarters yet at the same time easily accessible.

Progress

At this writing (August 10, 1918), the dormitories are finished and some 150 houses are either complete or well under way. The architects, Kilham & Hopkins, of Boston, who also acted as town-planners, were appointed April 29, 1918. Three weeks later their house-plans, specifications, and street layout had been completed, passed, and orders given to start. The dormitory plans had been approved even sooner, and materials had begun to arrive so that work was started about May 20. The first two dormitories were ready for occupancy about July 15. These are permanent frame buildings, plastered inside and covered with stucco outside. Fifty houses are promised complete by the contractors on August 15, and the entire project is to be finished by October. The engineers who worked out the details of the water-works, sewerage, streets, and other utilities are Lockwood, Greene & Co., of Boston. The con-

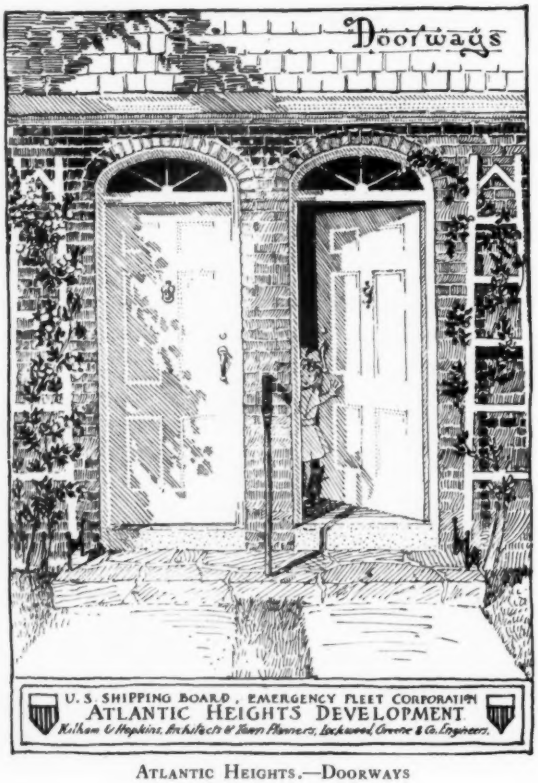
tractors for the entire work are the National Engineering Corporation, also of Boston.

Cost

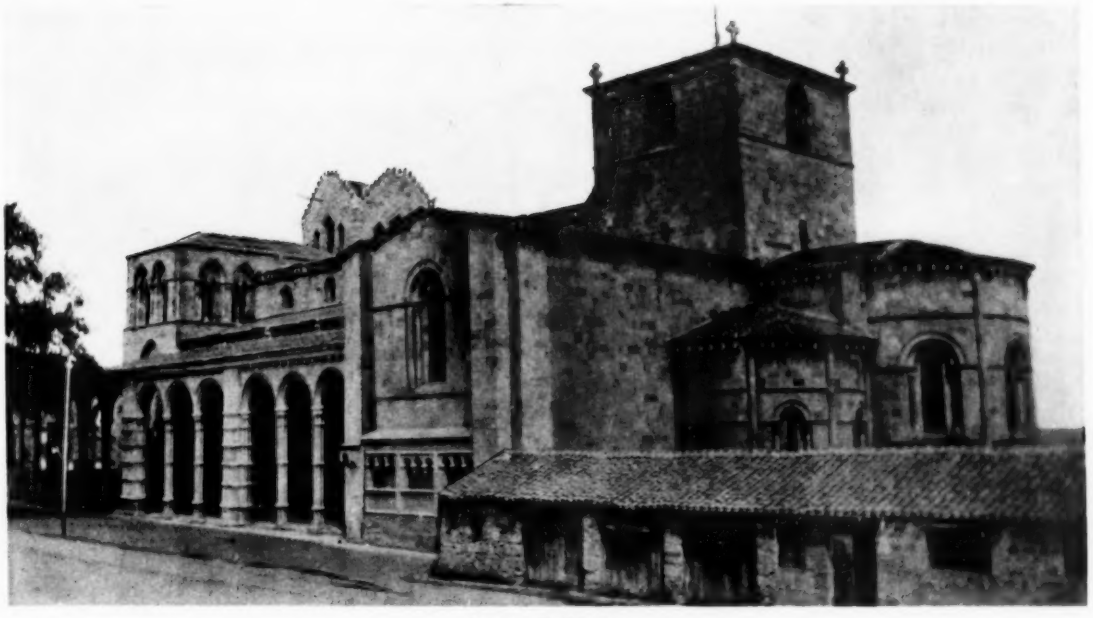
The average estimated cost of the houses is about $2,750, but the actual total can only be definitely told after completion, for the effect of the vexatious labor and "overtime" questions cannot be predicted. It is pleasant, however, to know that the completed dormitories show a saving of some $3,000 each from the original estimate. Some of this economy was due to the reconstruction by the contractors of the old wharf and the bringing of the lime and some other materials direct to the work by water.

To an unusual degree the future of Atlantic Heights seems to be assured. The shipbuilding industry is strongly backed, and its continuation after the war seems a probable certainty; but even without it the natural beauty, picturesqueness, and healthfulness of the locality would make it desirable, even as a summer resort, which perhaps can not be said of many of the other projects to which the Government is committed. Portsmouth, an ancient maritime city, asleep for sixty years and now becoming a busy center, is composed mostly of old and congested buildings. It is no great exaggeration to say that Atlantic Heights contains more bathrooms than all the rest of the low rent houses in Portsmouth, and this new, modern, and attractive suburb is not likely to suffer for want of tenants in any case.

If there still be doubters of the value of good houses, they might inquire what will become of all the Government-built houses now under way if the war should stop. Have they ever paused to think that, even if the war should come to an end tomorrow, these houses, many of which are now visible facts, would be absolutely the only tangible permanent assets, aside from the merchant fleet, which would be left from all of the twenty billions expended in the war for Liberty? And it is also worth while to remember that no private capital would have had the courage to take the situation in hand with such foresight and forethought as the Government has shown.



ATLANTIC HEIGHTS.—DOORWAYS



AVILA.—S. Vicente
From a photograph by E. H. Lowber

Early Churches in Spain

II. AVILA

By GEORGIANA GODDARD KING

SEATED both on the northern slope of the Guadarrama Mountains, Segovia and Avila were for long frontier fortresses, till Alfonso VI had taken Toledo and pushed the line of the Reconquest down to the basin of the Tagus. Both were Roman towns; both lay long under power of the Hagarenes; both were taken and lost more than once before Count Raymond of Burgundy undertook to repeople them. Here the parallel ends. In Segovia the story reads like that of Capulet and Montague and culminates in the gallant, foredoomed struggle of the Communeros; after that the Renaissance built fine palaces and churches finer than they, for no Spaniard would leave his God less well lodged than his family; lastly quiet came—"quiet of old men dropping to the worm." Wide-walled Avila, that had no citadel but the fortified cathedral itself, was a scene apt for history, where more than one king's tragedy was played out before she was handed over to *frailes* and *monjas*, to priestcraft and ecstasy, soft-footed inquisitor and barefooted reformer, Torquemada and Teresa.

Saints and stones are what Avila can show, says the Spanish proverb, though it is, unfortunately, all too possible to go to Avila and not find S. Teresa there. But on the wide plain which, higher than mountains stand, runs out to the farthest edge of the sky, one sharp road cutting it into a right hand and a left, pale and burning under the incandescent dome, out there you meet her traveling, with a patience as long as God's, about God's work, along the slow and lonely miles. To Count Raymond of Burgundy, the husband of Doña Urraca's youth, Avila owes—after the Romans—those indomitable walls within which the city lieth foursquare; and owes, furthermore, the style of the group of Romanesque and transitional churches that begins with S. Vicente and the cathedral, and suffices for a visit or for an essay. Even S. Tomas, which belongs to other rulers and another age, keeps somehow the illusion of

twin western towers and a narthex sunk between them, as surely as it keeps the Florentine loveliness amid Iberian enrichments in that tomb of the young D. John, which was to set the fashion in graves for a long while. It substituted the free-standing altar-tomb for

AVILA.—S. Vicente, West Door
From a photograph by E. H. Lowber

the niche, but Spaniards were apparently as stubbornly determined to lie upon a shelf as Russians to sleep on a stove, and the cathedral illustrates in a dozen instances the final triumph of the national determination.

The present cathedral is not Count Raymond's, more is the pity, for it spoils a great scene; how Alfonso VII, who was indeed Raymond's son, was brought to Avila by the party of Queen Urraca, his mother and the wife of Alfonso of Aragon; how El Batallador demanded to see his stepson and to that end a safe-conduct within the city for himself and an escort of seventy; how the meeting took place in what was neither within the walls nor without, in the so-called *cimborio* or fortified apse of the cathedral. The one Alfonso came up with his seventy true men of Aragon, the other, who was only a little lad, stood stiff there, ringed round with Castilian nobles and the men at arms of Avila; the two kings louted low to each other, and the elder turned on his heel and returned to his camp. But of a truth, the older part of the cathedral, which comes down to the transepts and includes the small eastern apses of these, belongs to the days of Alfonso VIII *el de las Navas*, who had an Angevine queen, at the close of the twelfth and the beginning of the thirteenth century. It must be counted as an Iglesia-Castillo, like those of Tuy and Turegano, Puerto Marin and Ujué, and as the greatest of them all. With three lines of defense, one within the other, it juts through and protects the single curtain of wall that is easily accessible, as from the railway station today, so always from the plain. The double ambulatory and its nine small chapels in the thickness of the wall are explained, the one as supplying a strong support to a passage where troops would march, the other as lightening and at the same time strengthening the vast mass of solid stonework. This eastern part had once a true triforium gallery, vaulted in a quarter-circle and opening by *ajimez* windows, horseshoe shaped, under a high, round arch. Later, that was torn away and a second set of flying buttresses applied at the angles between them. All this early part is very brilliant transitional building, inventive. The nave, on the other hand, lags and shows still Romanesque traits, though the work went on through the thirteenth century and under Bishop Sancho (1312–55) the vaults were closed in; by 1432 the cathedral was finished and a bull of Eugenius IV provides for its preservation. The western front, however, in between the towers, is palpable and very bad Renaissance, and there is evidence that here was once such a narthex as that at S. Vicente, with passageway between

AVILA.—S. Vicente, South Door
From a photograph by E. H. Lowber

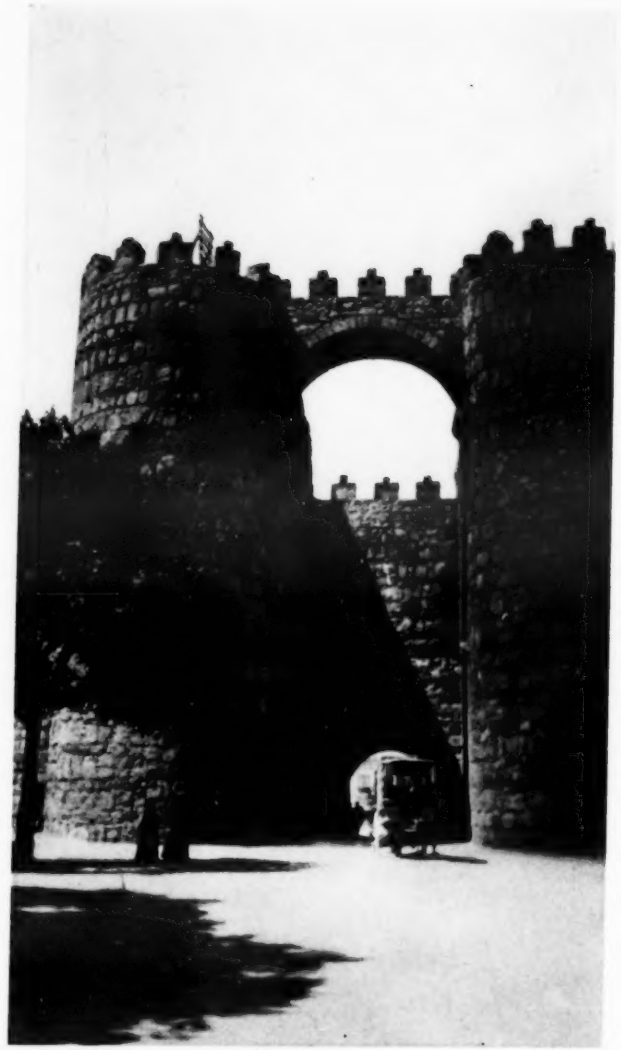
the towers. It is very possible that the purely gothic door in the northern flank has been removed thither from the west, though the writer is not certain, remembering the symbolism of those doors and their frequent appearance in Spanish churches, and French that were in touch with Spain, from S. Benoit-sur-Loire to S. André of Bordeaux.

Within, the cathedral of Avila stirs a feeling of France, an odd sense that the traveler may recollect in a moment what thing it should recall in Champagne or Normandy or Aquitaine, or, if not there, then elsewhere. It tastes of France. Not, however, of France, nor yet of anywhere else in the world, is the grey and austere beauty of the granite walls; the extraordinary magic of the mazy eastern end, turning and winding in sun-streaks and bewildering colored lights, with dim vistas and dimmer withdrawals, clues that open and baffling side recesses; the tender and morbid loveliness of Tostado's tomb and S. Catharine's altar, where marble seems to flush and pale, and breathe and shrink, under the carver's passion. The high altarpiece is very fair and fresh, with its cool greens and goodly crimsons and soft carnations, Italianate and comely, indebted to Francia and Perugino; the work of Juan de Borgoña and others. In the transepts and their chapels, from a few dim retables, the halos glimmer like full moons and the colors burn dark as sunset lights on still waters. On every hand, in a wall-recess, lies the figure of an armed knight, bareheaded and ungloved, his hound or his page on guard there at his feet, like the quiet ending to all *Libros de Caballerias*.

With its low lantern, its long and level nave,

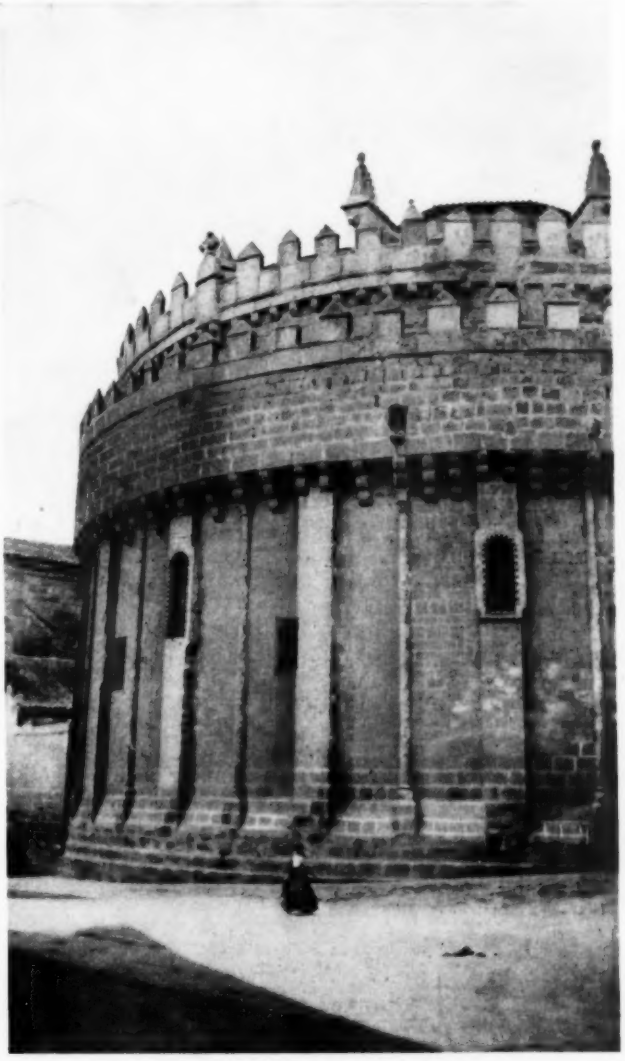
AVILA.—S. Vicente, South Door
From a photograph by E. H. Lowber

AVILA.—Door, S. Pedro
From a photograph by E. H. Lowber



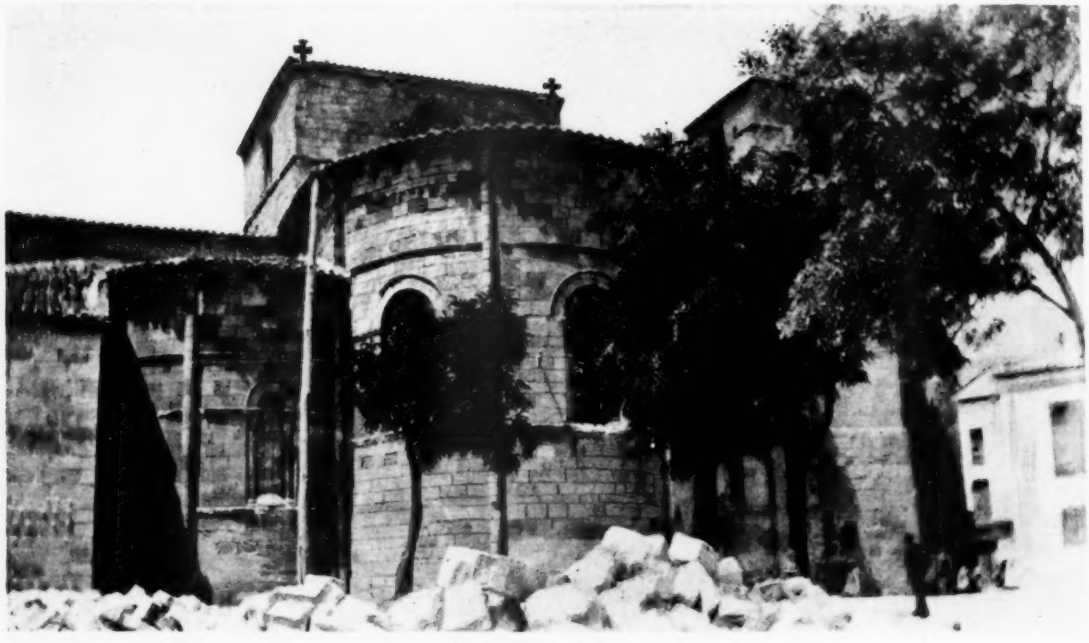
AVILA.—Puerta S. Vicente
From a photograph by E. H. Lowber

and its lost narthex outside; within, its strongly ribbed vault, its recognition of a difference between nave and aisle, its noble altitude, the cathedral, when all is said, partakes of the same style as the other churches, and the dominant's persistence is the note of Count Raymond and the Burgundian masters of *jometria* and *piedras taller* whom he fetched for the walls, who founded the *chantier* of Avila. They built, presumably, S. Vicente, since in 1109 the work was well along. By the middle of the thirteenth century, however, the fabric was out of repair and gravely endangered: Ferdinand the Saint in 1252, Alfonso the Wise in 1280, and Sancho the Brave, in 1290, yielded for the necessary works certain incomes, "*que estava mal parada para se caer;*" it was likely to tumble down. The church was planned in the Burgundian style, like a daughter-in-law of Cluny, with parallel apses, strongly marked transept, barrel-vaulted lantern, vaulted triforium, and narthex at the west between two towers. Only the north transept has a portal, the southern door being set in the second bay of the aisle, and down this flank runs a very beautiful open porch or cloister, of the Segovian kind, later than the rest. Segovia, which lent this and could not match its airy grace, took in exchange, perhaps, the art of the figures that stand in the door-jambs at S. Martin there. The aisles have groined vaults, those of the nave are ribbed, and the diagonals descend upon capitals that have been set askew on the angles of the piers. Men planned the nave, in effect, for a barrel-vault, and then either altered their intention or rebuilt; the latter is the less likely because the western doorway shows no signs of alteration, and it is possible that the portals were erected and finished before the vaults were commenced, by a method of horizontal rather than vertical procedure. This, though rare, we know was what happened at S. Sernin of Toulouse. The carving is all Burgundian.



AVILA.—Apse of Cathedral
From a photograph by E. H. Lowber

Long ago, M. Enlart pointed out that the broken scenes in the tympana over the western doors here, which represent the history of Dives and Lazarus and have nothing to do with S. Vicente, are copied straight from S. Lazare at Avallon; so likewise the beautiful rinceaux of the archivolts. It should be confessed in passing that the single figure left standing on the door-jambs at S. Lazare looks more like those at S. Martin of Segovia than any figures do in Avila. Now Avallon lies only a few hours' walk from Vézelay, where the great abbey,



AVILA.—Apse, S. Pedro
From a photograph by E. H. Lowber

contemporary with Cluny, preserves also a narthex that opens, in the upper story, on the nave, like that of S. Vicente; it is, however, completely closed in by a western wall, like the churches of Dijon, whereas S. Vicente has an open porch like the twelfth-century Chartres and S. Lazare of Autun. The workmen of Avila knew Avallon, Vézelay probably, and Autun certainly. Among the fragments of the shrine of S. Lazare there are two figures* which were copied by the workmen for the south portal here at Avila. The sitting king beside them, and the angel and Virgin opposite, are too much in the same style not to make the door count as a single piece, though it may be the work of a single man's entire life. With its conspicuous affinities, not only with the school of Toulouse but also with that of Vézelay, the style passes almost imperceptibly into that of the western doorway. Here the standing figures on the jambs, and the great seated Christ of the central post, will recall to every traveler the prophets, and the Creator Mundi holding the *orbis terrarum*, in the same situations at Vézelay; if, however, he has ever made the pilgrimage to Santiago de Compostela he will recognize that the figures turn one to the other, hold converse with gesture and glance in the same way there, but not at Vézelay; that apostles, likewise, there are set on the inner face of the jambs; and that the central sitting figure here, clothed in white samite, mystic, wonderful, bears much less likeness to the *Beaux Dieux* of France than to the far traveler, S. James, who rests upon his staff in the Gloria of Master Matthew. That was finished 1188. It should be added that this figure from Avila was, in the fourteenth century, copied upon the capital of the central shaft at S. Salvador de Leyre, in Navarre. What appears then, is, first, that the *chantier* at Avila was in constant and wholesome intercourse with Burgundy from the close of the eleventh century till some time in the thirteenth; and, secondly, that the current of intercourse was circulating freely between Avila, Santiago, and places on the pilgrims' road. One other point must be admitted and then left, namely, the painful likeness of style, in parts, between the towers of S. Vicente (twelfth century?), those of the cathedral (fourteenth?), and the west end of S. Tomas (nearly sixteenth).

Outside the Puerta del Alcazar, where the Market is still held, though now it is a part of

*Published by M. de Lasteyrie in Monuments Piot VIII.

AVILA.—Puerta del Alcazar
From a photograph by E. H. Lowber

the compact town, was played in 1465 a solemn ceremonial almost as cruel as an *auto de fe*, for which Archbishop Alonso Carillo of Toledo, after taking the city of Avila and the *cimborio*, the cathedral fortress, had sent to collect all the Grandees of Castile. His party at the moment was large, though some stood by the king. Henry IV, to all seeming, was a sort of preliminary study for the invariable protagonist of J. K. Huysman's novels, but it is possible that he was only such another as the English Richard II, though he wanted a Shakspere; fantastical and unhappy, wayward and corrupt, wanton and *ennuyé*, who wore his shame like purple with the pitiful effrontery of the helpless. This was his hour of Westminster Hall; that of Pomfret Castle was to come, and thereafter a state funeral at Avila, with mourning cloaks trailing around the nobility, and sobs and bitter weeping offered by the populace, which, however, is not the present tale. A scaffold, I say, was raised and thereon a throne set up, and on the throne an effigy of the wretched king, in mourning weeds, crowned, with sceptre and great sword of office. There stood the nobles close about, backed by two thousand soldiers and a thousand cavalry, while heralds read aloud ensamples out of history, how kings had been deprived in old time of their kingship, and followed with all the charges that could be rehearsed against the luckless brother of Isabel the Catholic; and the great lords stepped closer to declare the doom. "Unfit to reign," spoke the Archbishop, and took the crown from the kingly head. "Unfit to judge," spoke the Count of Plasencia, and took away the heavy two-handed sword. "Unfit to rule," said the Count of Benavente, and took the sceptre. "Unfit for a king's place," and Don Diego Lopez de Zuñiga threw the poor image down and cursed it foully. The people all the while stood round in silence outside the ring of soldiers. Then a child was brought forward, the poor king's brother, Don Alfonso, eleven years old, and lifted up in the arms and on the shoulders of these great lords, and at a signal from the military a loud cry went up, "Castile for King Alfonso." So the Grandees installed and enthroned him with crown and sceptre and heavy two-handed sword, and first they, and then all of the king's own men, tramped up to kiss his little hand. This was not indeed the end even of the chapter; a

day was soon to come in Simancas when the horse-boys of the town should mock this mockery, and, likening the Archbishop to the brother of the Count Don Julian that betrayed his king and his country to the Moors, with an envenomed *copla* that has come singing and stinging down the centuries, they burned his effigy in a huge bonfire.

On the Market at Avila, where the sorry pageant of Henry and Alfonso befell, still stands, as then, S. Pedro. The architecture is hardly less noble than S. Vicente and the cathedral; if left to itself in some lonely hill town, it would draw travelers, unaffronted by comparisons. The style is falling back into normal Spanish, but the church seems not so much younger, as, in the comparison, plainer and less first-rate, humbler. At S. Pedro the tower stands off to one side and farther east, but the apses are very fine. The church has lapsed upon a façade, plain except for the glorious wheel window, and characteristically Castilian and parochial. The many orders of the quiet western door, like those of the north and south, are turned in concentric arches without a tympanum, and carved with the lily in many forms, the billet, the double zigzag, and so forth. It carries, like S. Vicente, a low tower above a ribbed lantern, but wants a triforium, and, being prepared for a barrel vault, received one quadripartite and well-ribbed. Tawny without, reddish and blackened within, S. Pedro is beautiful in every view; grave, quiet and strong. Inside, the noble height breaks into an exaltation of the spirit. The light is silent there. The vistas across aisles and transepts here can make S. Segundo, on the river, seem no more than a pretty girl, with its blithe, round arches, like the colonnade of S. Vicente, and its comely marble bishop by Berruguete; the meek quietude of S. Pedro can touch, and can abide, as long as the virile power of S. Vicente or the cathedral's mingling of austerity with splendor, like scarlet and ermine over a hair-shirt.

The rare air of these altitudes lends itself to exaltation; the blue of the wide plain is like a Holy Land; the white city, in the pale fierce heat, is like the foot of Jacob's ladder. Inside the town not a leaf will burgeon of itself; outside, not a blade of grass pricks up between the tumbled stones. *Santos y Cantos* alone flourish at Avila—saints and stones.

AVILA.—S. Segundo
From a photograph by E. H. Lowber

War and the Building Industry

IN the form of little whines and snarls—sometimes in growls that are bolder and louder—there is a persistent propaganda being circulated with the very apparent object of forcing the Government to permit a revival of private building. Paragraphs and editorials in the public press bear so close a resemblance to the statements appearing in those publications that are controlled or strongly influenced by one closely knit group, that a common source seems to be indicated.

It is unfortunate that these covert attempts to hold a club over the Administration should continue. They are not likely to produce the desired effect in the first place, and they are beginning to give the impression that the building industry has taken the trials of war in a manner which is thoroughly unpatriotic, to say the least. It is a pity that the writers of this propaganda are not willing to sign it publicly. It would then be worth while to send it to the wounded in our hospitals in France and ask them what they think about it.

If by chance any of these particular whines and snarls do come to their ears, let us hope they will be sensible enough to realize that the vast majority of those in the building business will meet the sacrifice exacted of them in the spirit of men. A small minority will protest and make considerable noise and try to organize an opposition, but they will eventually be lost in the discard, and the Government will continue the plan it has marked out for itself. At least that is the belief which I am willing to record.

The building business has suffered, and it must continue to suffer, quite in common with many other industries and businesses. This seems unjust because in other lines of activity large profits are being taken. It seems unfortunate, as well, since the decline in building means that we shall be under some handicap at the close of hostilities. But this is war, and the loss must be measured in terms not of money; we must be men and we must put the question fairly: How can we save the most lives?

We need houses and the Government is building them. We need factories, and they are being built. We know that in this work we are saving lives by developing means for shortening the war. If we had more men and materials than we could use in war, then we might go on with private building as usual, but this is not the case. From now on—these lines are being written on Registration Day, September 12—this nation is face to face, as never before, with the problem of utilizing its whole man-power in a maximum effort to end the war and to save every human life which can possibly be saved.

Faced with this solemn consecration,—with this clear obligation to give our last atom of strength and intelligence in manfully safeguarding the army now in France and the larger one yet to go,—confronted with this grave duty and difficult responsibility, whining and snarling seem evidences of a spirit for which the language has no words sufficient to express the contempt one feels.

Satisfying the war needs of our army in France is one thing today and will be quite another next year, when we shall have to depend more and more upon our own industrial output. Toward that effort for 1919 nothing should be left undone, and I believe no greater tribute could be paid to an industry than the honor system under which it must now proceed with all building. The building industry cannot fail the nation, no matter what the sacrifice demanded; nor will the nation be misled by any selfish activities on the part of any group or any interest into believing that they represent the industry with which, unfortunately, they are identified.

The problem before us is to adapt and adjust and ceaselessly to seek means of fitting men into jobs where their work will count in shortening the war. This will involve hardships, sacrifices, losses, and some suffering. But to those whose hearts and souls are tuned to the solemn litany of war,—who think in terms of human life and who are alive to the meaning of those daily casuality lists as measured in the anguish for which there is no balm,—to such there will come a compensation ample to requite all hardships. To save the life of one soldier—toward what greater end can a man strive today, tomorrow, and every day? C. H. W.

Notes by the Wayside

AT A HEARING held to consider reasons for and against the demolition of St. John's Chapel in New York, an elderly lady gave three reasons that she thought excellent for tearing down the venerable building: first, she owned some property adjacent to it and the unused, neglected structure depreciated the value of her ground; second, the building was an eyesore in the neighborhood; third, the old church was unsafe and dangerous because its framework at the roof and other places, instead of being nailed, was held together with wooden "pegs!" Of course, we cannot believe that the Board holding the hearing would be swayed by the first reason, a purely selfish one; nor, with so many architects at the hearing testifying to the architectural worth of St. John's, can we believe that the second reason would prevail; so it must have been the third, for St. John's is being torn down. The old gem of Varick Street is fast disappearing and in a few days will be only a memory. It is hard to believe that in this country, with so few of the best things of olden times still standing, this really charming example of the monumental Colonial style would be sacrificed, and it is to the everlasting shame of the Trinity Corporation, owners of the chapel, that they gave neither assistance, nor even sympathy, to the movement for its preservation. In a later issue of the Journal, perhaps, there may be published some illustrations of St. John's and its quaint surroundings.

THE DEMOLITION of St. John's Chapel only reminds one of how fast landmarks of interest are disappearing in New York. Nine years ago the City History Club listed some sixty or seventy places of historical interest in the old Greenwich Village and Bowery Village sections of the city. Many of these were of considerable architectural worth—fine old houses with lovely stoops and porches were numerous. A walk the other day showed that hardly a half-dozen of these specifically listed landmarks remained. Most of the rest—like Peter Stuyvesant's pear tree, which thrived and bore fruit for the colonists for over two centuries, and should for that reason be remembered now by a spot of green or flowers—were merely warehouse or tenement sites, sometimes marked with a tablet. The outlying districts have fared little better—subway extensions and the contagious apartment-house fever have raised havoc with the physiognomy of New York.

AS MATHEMATICIANS would say, the New York subway is a world of two dimensions. This little world offers an opportunity for exercises in visualization and imagination in the third dimension, especially for architects. As a rule, riders in the subway are well acquainted with but few of the stations, and it is great fun, as you come to a station you know well, to visualize the physical appearance of and activity in the streets above. Still more fun and better exercise is to visualize imaginary scenes at the stations you do not know. Here you may build "castles in Spain," noble squares and great monuments—you may imagine things as you would like them. The rude awakening when, on emerging from the underground station, you find a group of tawdry shops or tenements and dirty streets, only acts as a stimulus for the picturing of things as they should be. So may unpleasant subway travel be made an interesting, profitable game.

SOMETIMES things are done quite precipitously, even in quiet, dignified Philadelphia. A few years ago a pool and formal garden, with their architectural accessories, were laid out and built in Rittenhouse Square. At the head of the pool was a wall faced with brilliantly colored tile. One night the tilework disappeared and was replaced with cement plaster. It was done quickly and quietly, no one knows how, just when, or by whose orders! No trace of the tiles has ever been found. If the deed was merely one of vandalism, it is to be deplored. If it was the violent expression of citizens outraged at a modern encroachment of old Rittenhouse Square, it is a hopeful sign.

HOW reminiscent a walk down New Hampshire Avenue in Washington is! Volume after volume of our architectural library is recalled before us. Here is a page from "Edifices de Rome Moderne," here a page from Palladio; there a leaf from "Hotels et Maisons de Paris," or perhaps the "Renaissance in Spain," and here, again, one from "Old English Homes." Those street blocks look like exemplars of architectural styles after the best manner of *old architectural books*. They are not copies of architecture; they are merely copies of drawings of architecture. The spirit and reason of the old work are lacking, though the profiles and shades and shadows may be there.

THE PRESENT beauty of Washington is not its most inspiring quality, but the possibility of its future grandeur is. One may wander up and down the Mall, loiter at the Monument or the Capitol, around Lafayette Square, or perhaps on the heights of Wisconsin Avenue near the new cathedral, and imagine those great schemes which have been planned, as already carried out, or perhaps imagine schemes of one's own. The setting is there, the beginning is there, and as you stand meditating, slowly those great structures of the future rise, mirage-like, to complete the picture. The whole composition comes before you and thrills you, only to fade away and leave you with a chill and an emptiness and a fear—a fear for what the future may really bring. Yes, the inspiration of Washington is not so much in what it is but in what it may become if everything goes well. To have conjured up those pictures has enriched you.—TRAVELER.

A Brief Record of Progress in the Government's War Housing Program

A MILLION American workmen, more or less,—probably more,—during the last two years, left their former homes and moved to the vicinities of new or enlarged shipyards and war-munitions plants to work directly or indirectly for the undoing of the Kaiser. They filled to overflowing the existing housing facilities. Beds worked three shifts, and several beds were crowded into a room. Men lived in tents and cooked their food in holes in the earth. Landlords grew rich. The speculative builder came not to the rescue because the job was far too great for his credit or organization. All of which is a twice-told tale in these columns!

Many of the new plants handled explosives and were necessarily located remote from any existing habitation in broad reservations of wilderness fenced by miles of high barbed wire and armed soldiery. In sixteen of these cases, housing of some sort was necessary, and it has been built by the agent and operator under the instructions of the Ordnance Department, the cost being merged with that of the plant and the product. A "Housing Branch" in Ordnance, in which a firm of architects, Mann and McNeille, of New York, played a valuable part, supervised these housing operations. This branch has been practically discontinued since June 4, for then the signing of the specific housing appropriation made the further use of general funds inapplicable, and future housing additions, which the growth of the plants will necessitate from time to time, must, according to the Judge Advocate General, be built by the Bureau of Housing of the Labor Department.

A congressional appropriation of $50,000,000, followed by another of $45,000,000, gave the Emergency Fleet Corporation its chance to develop its Department of Transportation and Housing under the direction of A. Merritt Taylor, at Philadelphia. About $20,000,000 of this is reserved for Transportation, in which Mr. Taylor has great faith, and, in September, $50,000,000 had been allotted for housing projects at twenty different points, leaving about $25,000,000 still to be allocated.

The appropriation of $60,000,000 (of which $10,000,000 was reserved by the Act for Washington, D. C.) for a new Bureau of Industrial Housing and Transportation in the Labor Department, under the direction of Mr. Otto M. Eidlitz, was signed in June and was followed by a second appropriation of only $40,000,000, although Mr. Eidlitz urged that it be $100,000,000. In September all this had been allotted among about sixty-five localities for the benefit of the manufacturing programs of the Army and Navy, and large additional appropriations must be asked for from Congress in November.

There have thus been three Federal industrial housing authorities, one being now discontinued. It is understood to be the President's ultimate intention, under the powers of the Overman Act, with Mr. Hurley's consent, to consolidate the Fleet Corporation's bureau into the Labor Department's bureau, but neither Mr. Eidlitz nor Mr. Taylor consider this practical or desirable at the present time.

As might be expected, policies and results have been diverse.

Ordnance Department Towns

The ordnance towns are mostly temporary and serve temporary plants, and interest centers in the ways that freak problems have been met.

Nitro, near Charleston, W. Va., for example, is a wooden city of 1,700 bungalows and many dormitories, bunkhouses, and the like, planned and created on vacant land by a single builder, Thompson-Starrett Co., for the Hercules Powder Corporation. September finds it complete and crowded. The bungalows are ready-cut construction and can be taken down again and sold when the war ends. The town includes a Y. M. C. A., stores, restaurants, schools—all the paraphernalia of a complete American community of 15,000 population, but its temporary nature has discouraged architectural attempts at variety or charm.

The largest Ordnance project is Old Hickory, a Dupont powder plant near Nashville, with a temporary population of 10,000 employees and many families now on hand and perhaps 5,000 more to come.

Muscle Shoals, Ala., is a permanent Ordnance town, a city of 1,300 dwellings (including negroes) near Sheffield for the Air Nitrates Corporation, whose plant will continue to manufacture, for fertilizer purposes, after the war. A great hydro-electric plant just started by the Army engineers gives additional assurance of permanency. Muscle Shoals is well planned on an attractive site, and the housing, while of low grade by northern standards, with many two- and three-room cabins, is superior to that generally available for workers in that region and has superior sanitary engineering and community facilities. Work on the village has awaited the finishing of the plant, but several hundred houses are up, and the village will be completed this fall.

The highest-grade village is at Perryville, Md. It catches the eye from the Pennsylvania R. R. trains crossing the Susquehanna—a pleasant town of white cottages with green roofs. These houses have three or four bedrooms, fireplaces, furnaces, good electric fixtures, living-rooms 11 by 18, and spacious porches. Only a few types are used, but monotony is avoided by adroit spotting and a good street-plan. The housing is for higher grade workers than elsewhere,—chemists, for instance—and, except for the lack of servants' rooms, would satisfy any $5,000-a-year man.

At Morgan, N. J., near South Amboy, is found an Ordnance village of different type—for men only—with all varieties of housing from open bunkhouses and dormitories with two men and two-tier beds in tiny bare rooms, up to seven-room clap-boarded cottages and bachelor apartments with private baths, for office workers and exec-

utives. About 1,500 are housed here now, and more housing will come later when the plant gets into full operation. The scene suggests any army cantonment, crude and raw, a sea of red mud crossed by wooden walks, houses all unpainted, barbed wire and sentries to exclude visitors, a field full of weather-beaten Fords, which, with the trolley extension, carry many workers home to neighboring towns, a cheerful atmosphere of hustle and crowds and war. The plant employs some women, but they do not sleep here. A bus service carries workers from the village over the long hill to the plant whose galvanized iron roofs show on the horizon beyond another wire fence.

At Woodbury, N. J. (near Camden), on the other hand, is a nunnery, labeled "No Man's Land," with a fenced and guarded group of two-story dormitories, grey, with green trim, housing sixty girls each in single rooms, with matron's office, parlor, writing-room and screened porch; 850 girls altogether and 1,200 more to come, many of them being school teachers and college graduates or undergraduates who joyfully don yellow bloomers to do their bit weighing exact propellant charges into silk bags with a precision that determines the accuracy of future gunfire in France. On occasion they mass on the newly sodded lawns for songs and folk-dances or to hear singers and speakers.

In all the Ordnance towns the employer is also town builder and landlord, which has advantages and disadvantages. The agency contracts give the War Department continuous control, but the employers have varying ideas of social and living standards, and, in some cases,—at Old Hickory, for instance,—conditions have been neglected and the workers treated with a lack of consideration which has found its reaction in a very high labor turnover and slow costly production. Ordnance accordingly has organized a Community Organization Branch, headed by Fred C. Butler, to deal with such conditions. He has found it necessary, for instance, to establish a War Department School System to provide schooling for 6,000 pupils at some ten plants where the remoteness of the location and the fact that these are non-taxable Government reservations made special provision essential. The schoolhouses are all on one model, with arrangement for serving two simultaneous shifts of pupils on the Gary principle. Mr. Eidlitz will draw upon that agency for the teachers and books which will be needed in certain of his projects.

Emergency Fleet Corporation Towns

The Emergency Fleet Corporation's towns are the most interesting because they are permanent and large, giving opportunities for town-planners and architects to show America how workmen may be housed properly when there is an authority adequate to handle the task on a bold scale. The first 907 houses at Yorkship Village, Camden, their largest venture, are almost ready for occupancy, and a thousand more are under way. The charm of the architecture and town-plan is already evident, and when the mud gives way to grass and paving and good order, America will come to see and marvel and wonder "why not more of this after the war for its own sake?" The plans have already been illustrated in this Journal.

The Emergency Fleet Corporation finances and supervises the creation of these towns by lending about 95 per cent of the necessary funds to special local realty companies organized for the purpose by the ship-builders whom the housing serves, with a proviso that an appraisal after the war will determine the extent of the war-cost to be written off the Government's loan. Substantially, the employer is landlord. No sales of individual houses are contemplated for the present.

Labor Department Towns

Mr. Eidlitz's problems in the Labor Department's Bureau of Industrial Housing have been far more diverse and difficult, his machinery has been more elaborate, and his results usually less captivating to the imagination.

To begin with, he serves two departments, Navy and War, and must balance their rival needs and wait upon their certificates of the relative urgency of easing the labor-shortage of this or that embarrassed manufacturer. His investigations of congestion and housing needs must deal not with one manufacturer but with all the war industries of a region, and with statistics of employment which are difficult to get and subject to incessant change. The actual solution of the housing problems disclosed up to date is $300,000,000 beyond his appropriation. The unity of his projects is often shattered by the fact that he must aid manufacturers at opposite ends of town, e.g. Niagara Falls, or Rock Island. Most of his projects being for $1,000,000 or less, can be, and therefore must be, placed where utilities are already installed; hence he has few separate new towns or suburbs to give him scope for broad planning and showy results but must sandwich in his houses here and there where empty lots are available. In some cases he must provide a few temporary dormitories or a cafeteria to supplement the facilities of an arsenal or an Ordnance town.

By an order of the Secretary of Labor, the important policy has been fixed for Mr. Eidlitz of "no sales until after the war; meanwhile direct Government construction and operation; no loans to local companies nor division of control with local private capital." The adoption of this policy in June upset several pending negotiations, but it has saved time and effort in the attack on new problems and cleared the way for thorough study of the disposal problem.

An operating division, headed by Allen Robinson, of New York, has been created. It is planned to have a manager at each project, always a non-resident at the time of his appointment, and subject to transfer and promotion to larger projects. Local advisory boards of five, including one representative of the employees and one of the employers, will probably be organized to assist the Division.

A feature of Mr. Eidlitz's policy has been an insistence that the architects shall ascertain the likings of the workers and their wives. It has been found that workers are conservative and prefer to follow familiar local housing traditions, disliking toy towns or novelties of architecture or anything that sets their homes apart from those of other people's. Practically all the dwellings are for skilled mechanics, since it is always this class of workers whom the war manufacturers need most, common labor being obtainable somehow, even where congestion is bad. The Government, therefore, is not solving the old conundrum of how to house common labor.

PROGRESS IN THE GOVERNMENT'S WAR HOUSING PROGRAM

In the future is one town that deserves special mention—Neville Island—for there lies the greatest chance of all. Neville Island is a long bar in the Ohio River, 2 miles below the city limits of Pittsburgh, where the United States Steel Corporation is building for the Government a great permanent cannon and shell plant at a cost of $140,000,000. It will employ upward of 12,000 men—possibly 25,000. The region is already congested, and a great housing development is indicated on an admirable site of farmland on the southern shore. The land is 400 feet above the river, broken by ravines, and from a low bridge across the shallow and unnavigable branch of the river a roadway will lead a mile up to the town through one of these wooded ravines, following a brook which at one point could make a small lake. From the head of this ravine the plateau spreads like a four-leaf clover between other ravines, which would naturally be parks. The $7,000,000 which is reserved for this project is only a starter. At least $20,000,000 more will be required from later appropriations, and a new city of at least 5,000 dwellings—25,000 people!—seems certain to be put there before the end of 1919.

The Problem Before Us

The bulk of future appropriations to Mr. Eidlitz's bureau will probably be used for the expansion of present projects. The existing schedules are all utterly inadequate, and, in fact, the mere expansion of industries is in some cases faster than the provision of houses, leaving towns as congested as before. There are several points where $20,000,000 worth of houses would be instantly absorbed, and would pay their way a dozen fold by speeding up the plants to full three-shift capacity.

The grand total of population housed, or to be housed under present approved plans, by Ordnance, Fleet, and Labor Departments combined, figures up to about 275,000, of which approximately half are women and children of the workmen's families. Impressive as this figure is, it probably covers less than 25 per cent of the problem!

A List of Government Housing Projects Under Way and Proposed with the Size and Character of the Accommodations Provided

Emergency Fleet Corporation Projects

Abbreviations —ds., dwellings; apt., apartment; sch., school; dorm., dormitory; bdg.-h., boarding house.

		Architects
Bath, Maine.	90 ds., 6 dorms. for 288, mess-hall.	R. Clipston Sturgis, Boston.
Bristol, Pa.	42 bach. qtrs. for 840, 14 bdg.-hs. for 840, 20 apts. for 250, 258 ds., 1 sch.	Carroll H. Pratt, New York City.
Camden, N. J.	2,107 ds.	Electus D. Litchfield, New York City.
Chester, Pa.	227 ds., 1 bdg.-h. for 25, 23 apts. for 319, 1 hotel.	Simon & Bassett and C. E. Brumbaugh, Philadelphia.
Chester, Pa.	548 ds.	Ernest Flagg, New York City.
Essington, Pa.	200 ds., 1 apt.	C. W. Braser, New York City.
Essington, Pa.	6 dorms. for 500, mess-hall and recreation-room.	Durling, Okie & Ziegler, Philadelphia.
Gloucester, N. J.	500 ds.	Bissell & Sinkler, Philadelphia.
Jacksonville, Fla.	165 ds., 3 bdg.-hs. for 86.	H. T. Klutho,
Lorain, Ohio.	244 ds., 2 apts., 1 sch.	Abram Garfield, Cleveland
Manitowoc, Wis.	100 ds., 1 dorm. for 300.	Earl Franklin Miller, Manitowoc.
Newport News, Va.	500 ds., 4 apts. for 372.	F. Y. Joannes, New York City.
Pensacola, Fla.	200 ds.	
Philadelphia.	960 ds., 16 dorms. for 800.	Geo. M. Bartlett, New York City.
Portsmouth, N.H.	300 ds., 8 dorms. for 400, 1 sch.	Kilham & Hopkins, Boston.
Port Jefferson, N. Y.	9 ds., 1 dorm. for 400.	A. C. Bossom, New York City.
Savannah, Ga.	230 ds., 1 hotel for 180, bdg.-hs. for 255.	
Sparrows Point, Md.	827 ds., sch., stores, etc.	E. L. Palmer, Jr., Baltimore.
Vancouver, Wash.	100 ds. and hotel.	
Wilmington, Del.	506 ds., 3 apts. for 51, community bldg., sch.	Ballinger & Perrot, Philadelphia.
Wyandotte, Mich.	200 ds.	

Under consideration —Groton, Conn.; Newburgh, N. Y.; Wilmington, Del. (dorms.); Staten Island, N. Y.; Seattle, Wash.; Philadelphia; Alexandria, Va.; Suisim Bay, Calif.; Tacoma, Wash.; Chester, Pa. (dorms.); Duluth, Minn.; Superior, Wis.; Ashtabula, Ohio.

Ordnance Department Housing

(Not including housing built solely for construction gangs)

		Employees Housed
Bethlehem, Pa.	16 dorms., dining-hall.	960
*Brunswick, Ga.	636 ds., 12 dorms., cafe, sch., etc.	1,600
Edgewood, N. J.	dorms., barracks.	5,000
aErie, Pa.	738 ds. and apts., dorms., clubs, etc.	2,200
Hammondton, N. J.	dorms., barracks.	1,550
Mays Landing, N. J.	193 ds., 46 dorms., sch., etc.	2,776
Morgan, N. J.	ds., apts., dorms., com. bldgs.	1,500
Muscle Shoals, Ala.	1,300 ds., sch., stores, etc.	2,600
*Neville Island, Pa.	12 dorms., stores, etc.	3,072
*Nitro, W. Va.	1,850 ds., 33 dorms., schs., clubs, stores, etc.	5,400
Old Hickory, Tenn.	1,703 ds., 287 dorms., misc.	10,302
Penniman, Va.	448 ds. and apts., 110 dorms., com. bldgs., etc.	5,918
Perryville, Md.	87 ds., 3 bdg-hs. com. bldgs., etc.	220
Sheffield, Ala. (Nitrate No. 1).	300 ds., 2 dorms., sch.	650
aTullytown, Pa.	14 ds., 8 dorms., hospital	230
aWoodbury, N. J.	12 dorms., 12 converted houses.	850

*Construction-gang housing intended also for operatives.
aSee, also, U. S. Housing Corporation List.

Department of Labor (U. S. Housing Corporation) Projects

		Architects
Aberdeen, Md.	5 convertible houses for 60, 40 ds.	Sill, Buckler & Fenhagen, Baltimore.
Alliance, Ohio.	181 ds. (2 sites).	Walker & Weeks, Cleveland.
Bath, Maine.	45 ds. and alterations, for 90 families.	Parker, Thomas & Rice, Boston.
Bethlehem, Pa.	1,193 ds., apts. for 60, 25 stores, 5 offices, 1 theatre, 1 recreation bldg., a clubhouse.	Zantzinger, Borie & Medary, Philadelphia.

		Architects
Bridgeport, Conn.	360 ds., 50 apts.	R. Clipston Sturgis, Boston.
Butler, Pa.	60 ds.	Edward B. Lee, Pittsburgh.
Charleston, S. C.		Favrot & Livaudais, New Orleans, La.
Charleston, W.Va.	85 ds.	Godley, Haskell & Sedgwick, New York City.
Davenport, Iowa.	396 ds.	Temple & Burrows, Davenport.
Dayton, Ohio.	120 ds., apts. for 150.	Schenck & Williams, Dayton.
Eddystone, Pa.	700 ds.	Rankin, Kellogg & Crane, Philadelphia.
Ridley Park Site, Eddystone, Pa.	400 ds.	Edgar V. Seeler, Philadelphia.
Elizabeth, N. J.	210 ds.	C. W. Oakley & Hugh Roberts, Associated, Elizabeth.
Erie, Pa.	833 ds., apts. for 76, 12 stores.	A. H. Spahr, Pittsburgh.
Hammond, Ind.	163 ds., 11 bdg.-hs.	J. C. Llewellyn, Chicago.
Ilion, N. Y.	100 ds., 5 dorms. for 150.	Walker & Gillette, New York City.
Indian Head, Md.	45 ds., 3 dorms. for 99, sch., cafe.	Donn & Deming, Washington, D. C.
*Indianapolis (Stenotype Co.)	dorms. for 150 (convertible).	
Kenilworth, N. J.	4 bdg.-hs. for 100.	Starrett & Van Vleck, New York City.
Lowell, Mass.	120 ds. and dorms. and café.	H. L. Rourke, Lowell, and J. H. Ritchie, Boston.
Mare Island, Calif.	87 ds., 30 apts., 10 dorms., mess-hall, stores, recreation-hall, sch.	Geo. W. Kelham, San Francisco, Calif.
Milton, Pa.	60 ds., bdg.-hs. for 300.	Clinton Mackenzie, New York City.
New Brunswick, N. J.	192 ds.	Trowbridge & Livingston, New York City.
Newcastle, Del.	30 ds., dorms. for 514.	Chas. C. May, New York City.
New London, Conn.	134 ds.	Hoppin & Koen, New York City.
New Orleans, La.	104 ds.	Favrot & Livaudais, New Orleans, La.
Newport, R. I.	47 ds.	Clarke & Howe, Providence, R. I.
Newport News, Va.	1,000 ds., (convertible houses), mess-hall, sch., stores.	Francis Y. Joannes, New York City.
NiagaraFalls, N.Y.	390ds., bdg.-hs. for 150.	Dean & Dean, Chicago.
Niles, Ohio.	125 ds.	Geo. H. Schwan, Pittsburgh.
Norfolk & Portsmouth, Va.	1,500 ds., 220 ds. (colored).	Geo. B. Post, & Son, New York City; Rossel Edward Mitchell, Norfolk, Va.
*Penniman, Va.	5 dorms.	
Pensacola, Fla.		Favrot & Livaudais, New Orleans, La.
Philadelphia Navy Yard.	576 ds.	Rankin, Kellogg & Crane, Philadelphia.
Portsmouth, N.H.	31 ds., 2 hotels.	Allen & Collins, Boston.
Puget Sound, Wash.	400 ds., 3 apts., 1 hotel.	A. H. Albertson, Seattle.
Quincy, Mass.	400 ds., dorms. for 960.	J. E. McLoughlin, Boston.
Rock Island, Moline and East Moline, Ill.	460 ds.	Cervin & Horn, Rock Island.
*Seven Pines, Va.	400 ds., hotel, 10 dorms., cafes, clubs, p. o., etc.	
Sharon, Pa.	200 ds.	Geo. H. Schwan, Pittsburgh.
Sheffield, Ala.	100 ds.	Warren & Knight, Birmingham.
Staten Island, N. Y.	72 ds., apts. for 30.	Delano & Aldrich, New York City.
*Tullytown, Pa.	125 ds., 7 dorms. for 686, 1 bdg.-h. for 46, clubs, sch.	
Warren, Ohio.	75 ds.	Geo. H. Schwan, Pittsburgh.
Washington, D.C.	dorms. and apts. for 5,000.	Waddy B. Wood, Washington.
Washington, D.C. So. Capital.	150 ds.	Marcia Mead, New York City.
Washington Navy Yard.	224 ds.	Ray & Waggaman, Washington.
Washington Navy Yard.	apts. for 252.	York & Sawyer, New York City.
Waterbury, Conn.	204 ds.	Murphy & Dana, New York City.
Watertown, N. Y.	300 ds., dorms. for 750.	Davis, McGrath & Kiessling, New York City.
Watervliet, N. Y.	35 ds., hotel for 150.	Stanton P. Lee, Troy.
*Woodbury, N. J.	20 dorms. for 1,200.	

*Not selected at this time.

Under consideration —Alton, Ill., 400 ds.; Broadwell, Ohio; Canton, Ohio, 200 ds.; Grand Rapids, Mich.; Hamilton, Ohio, 150 ds.; Lake Denmark, N. Y.; Muskegon, Mich., 200 ds.; Neville Island, Pa.; Port Penn, Del.; Portsmouth, Ohio, 40 ds.; San Francisco, Calif.; Seattle Wash.; South Bend, Ind.; Stamford, Conn., dorms.

NOTE.—The schedules of housing to be provided are subject to incessant change, and the figures given in the above list may vary when projects are finally completed.—THE EDITOR.

News Notes

The Government's Need for Community Managers

The Department of Labor announces the need for men as managers for its various communities which are being developed throughout the United States. Men of special qualifications, training, and temperament will be needed to fill these positions, and it is hoped that volunteers from different parts of the country will offer their services, so that the Government will get the assistance of the best men in the country in this important branch of its war work.

The management of the Government communities will involve, not only the collection of rents, the supervision of repairs and maintenance of the buildings, but will include oversight and responsibility for sanitation, cleanliness, fire and police protection, and the general health and welfare of the inhabitants.

It has been decided, as a matter of policy, that communities are not to be managed by local managers. One of the reasons for the adoption of this policy is that the transfer of managers from one community to another will result in the creation of a corps of trained experts in this line of work.

All men desiring to offer their services to the Government in this capacity are urged to communicate with the Operating Division of the Bureau of Industrial Housing and Transportation of the Department of Labor, 613 G Street, Northwest, Washington, D. C.

Housing in Washington, D. C.

The problem of finding room for war workers in Washington is becoming more and more acute. The net increase in new workers averaged something over 1,000 during each week in August, while in the present month it has risen to about 4,000 a week. Departments are expanding under the continuing pressure of war, and no end to that expan-

sion appears to be in sight. Some fifty private houses have been commandeered through the Department of Labor's Bureau of Housing, but these will only yield accommodations for about 400. The new dormitories being built by the Government will go but a little way toward solving the problem, which is complicated by factors very difficult of solution.

Workers are advised not to bring their families here, but in the case of army officers transferred from various points, no alternative is left them save to bring their families to Washington. Even though they be again transferred to active service overseas, their families like to remain in the Capital. Two major solutions suggest themselves: Either there will have to be a transfer of some governmental departments to other less congested cities, or else those people living in Washington who have no business or occupation will have to find other homes. The situation cannot long rest in its present state, although the absorption into private houses has been greater than was thought possible and can undoubtedly be made still further to help in easing conditions.

On the other hand, street railway facilities are grossly inadequate, while the problem of provisioning aggravates an already difficult problem of transportation, and the cost of living in Washington is today higher than in any other American city.

Housing in Iowa

A great agricultural state seems the last to suggest a housing problem, yet at the conference held at the call of Governor Harding, on September 2, he himself disclosed, in his address, the existence of slum property of the sort which commonly disgraces our nation. "There are," he declared, "shacks within less than a mile of the State Capitol that cost not more than $300, from which the owners derive an annual rental of $200." And with a vision of that great National good upon which the eyes of men are fastening with increasing eagerness, he added: "If the bond loan plan inaugurated by the Federal Government is good for the farm, it is good for the man who wants a home."

As a result of the conference there was formed the Iowa State Housing Association, the object of which will be to study and prepare a general law for presentation to the next Assembly. Prof. Allen H. Holmes, president of the Iowa Chapter, is a member of the committee which is to draft the bill.

Housing in New Orleans

Newspaper reports indicate that New Orleans interests have stated that the city has ample facilities for caring for 10,000 workers, if necessary, in connection with war work. But Mr. Frank E. Wood, Labor Commissioner, at once has the courage to point out that the facilities described as existing in such sections as are indicated by the pleasant-sounding names of Jefferson Davis Parkway and Tulane Avenue are of the kind which ought to have been burnt down or destroyed many years ago, while a great quantity of the room stated to be available is included in the recently vacated "tenderloin district," which has been an eyesore and a disgrace to New Orleans for years.

Take care, New Orleans! Those who love you as one of the most interesting and fascinating of American cities look askance upon this attempt to deceive yourself! No one is fooled, in these times, on housing questions, except those who deliberately hide their heads in the sand, and consign their future to the hands of speculative interests and the manipulators of real estate.

The British Government's Plans for Better Workmen's Houses

It is expected that the Royal Institute of British Architects will publish the premiated plans submitted in the National Housing Competition, probably with views in perspective. A committee of the R. I. B. A. is to supervise the erection, on sites to be provided by the Government, of some dozen or more houses of the different types judged worthy in the competition. These will serve as patterns of a kind which can be easily understood by workmen and their wives, which cannot be said of plans and elevations. The pattern houses will be furnished suitably and thrown open to the public for inspection, suggestion, and criticism, and will be altered and improved as may be deemed wise.

Billboard Regulation in Virginia

Fredericksburg, Va., famous in history, scene of a bloody battle over fields which still yield up their mementoes of the day, has even a more precious dower. Lying peacefully on the southern bank of the Rappahannock, it has a river frontage which yields to none in this country in its possibilities for communal development. With patience and a little money, its citizens might enjoy a pleasure of which they have seemed too oblivious. Are they completely insensible to the rich beauty of those foliaged shores, where leaf and bough pile up a luscious mass of such exquisite softness and delicacy that strangers, coming suddenly upon it, cry out with pleasure and remember it for many a day?

This little speculation is prompted by the news that Fredericksburg has passed a billboard ordinance, regulating, to a considerable degree, the use of these atrocious abominations, than which no other thing has contributed more to the debauchery of public taste in matters affecting the appearance of our American communities. And so, in applauding Fredericksburg for this courageous action, we wonder whether it may not be the forerunner of others to come, whereby she shall save, ere the opportunity is either gone forever or rendered hopelessly costly, the proud diadem of her river shore, a legacy which nature bestows with meager hand, and which, as a nation, we have so easily and so quickly forgot for the glittering and ephemeral baubles of our day.

New Officers—Illinois Chapter

At a special meeting of the Executive Committee of the Illinois Chapter, A.I.A., on Tuesday, September 10, the resignation of Mr. D. H. Burham as president was accepted, and Mr. George W. Maher, first vice-president, was elected

president. Mr. Thomas E. Tallmadge, second vice-president, was then elected first vice-president. Mr. Francis W. Puckey, a member of the Executive Committee, was then elected second vice-president, and Mr. John L. Hamilton was elected a member of the Executive Committee to succeed Mr. Puckey. Mr. Melville C. Chatten was elected a member of the Executive Committee to succeed Mr. Robert S. DeGolyer, resigned.

President Maher, in his inaugural address, referred to the fact that Mr. Burham had resigned to take his place in war service, and that two other presidents of the Illinois Chapter resigned before their time of office expired, namely, Mr. Charles H. Hammond and Mr. N. Max Dunning, both of whom are now actively engaged in war service. Mr. Burham therefore makes the third president who has resigned from the Chapter up to the present time.

President Maher also referred to the active steps taken by the Institute toward anticipating the great reconstruction period that will inevitably follow all phases of human endeavor immediately after the war. "This is a mighty problem to solve," said he, "and will worthily tax the combined effort and imagination of the leaders of the Institute. What the future has in store for the individual architect and the profession immediately following the war no one with certainty can predict. That the Institute has settled upon a policy of attempting to arrive at some definite plan of action by visualizing the future at this time is highly commendable.

"We are fully aware that the great ideal of service of the Institute is to make of America a more attractive country in which to abide, where beauty and practicability are properly combined and encouraged so that the humblest hamlet, town, or city, or the country at large will feel the influence of the trained and cultured mind working in a way that will result in a greater and more beautiful America. This principle of service is the very essence of Democracy."

U. S. Navy Steam Engineering School

The U. S. Navy Department has perfected plans for the enrollment and training of considerable numbers of engineering officers, and has established a school for this purpose at Hoboken, N. J.

The school is open to men between the ages of twenty-one and forty who meet the physical requirements of the Navy, who are of thorough ability and officer-like character, who have completed the mechanical or electrical engineering course at certain recognized technical schools, or who possess an education and experience adjudged to be an equivalent thereof.

The course consists of five months of training divided as follows: One month of training at the Naval Training Camp, Pelham Bay Park, N. Y.; one month of technical work at the U. S. Navy Steam Engineering School, Hoboken; two months practical training on board overseas transports and in shops in the vicinity of New York; and one month finishing course of instruction at the U. S. Navy Steam Engineering School.

Applicants will be enrolled as chief machinist mates, and during the course of instruction will draw the pay of this rating, $83 per month, plus $60 per month paid as subsistence. Upon graduation, men will be commissioned as ensigns in the U. S. Naval Reserve, with a salary of $1,700 per year. The duty to which a graduate of this school will be assigned will be that of an Engineer Officer in the Auxiliary Service of the Navy.

Special provision has been made for the continuance of the school with proper material by a Navy Regulation which permits undergraduates of the freshman, sophomore, and junior classes in recognized engineering schools to enroll in the Naval Reserve Force, with the rating of Seaman, Second Class, and continue their courses at the institutions where they have matriculated. Such men will be called into active service after their graduation and may at that time, if they are qualified to pass an officers' physical examination, apply for admission to the U. S. Navy Steam Engineering School.

Men who are registered in the draft, either graduates or undergraduates, may enroll with the proper enrolling officer by securing from their draft board a letter of release which in all probability can be obtained for this purpose.

Men already in the Naval Service, and properly qualified, should apply for admission to the course to the Commandant of the Naval District in which they are stationed, via their commanding officer. They will be transferred to the school through a weekly quota from Naval Districts, if their commanding officer considers them available for this special duty.

Institute Committees for 1918-1919

Contrary to our expectations, it has been impossible to complete the routine work of creating the new committees of the Institute, and publication of their personnel and instructions must therefore be deferred until the October issue. In our editorial columns, reference is made to the Committee on War and Post-War Conditions, a new committee to be created by the Board for the purpose of making a complete study of the architectural profession in all its relations. This Committee will be discussed at length in the October number, while its progress, as it takes up the study of the many questions at issue, will form the subject of interesting articles to appear in following numbers.

A Curious Housing Emergency

In an article dealing with the progress of housing by the Government, reference is made to the Ordnance Department town of Nitro. Here there arose one of those unusual complications which are demonstrating the related factors which enter into and form so vital a part of the solution of these questions. The Kanawha Valley produced no more milk than the quantity required to satisfy its ante-war population, and it became necessary to provide an adequate supply at once and in some manner not involving the creation of a new local dairy supply. Today, by simple and ingenious means, a well-equipped plant mixes the powders obtained from the dehydration of butter and skimmed milk in Wisconsin and supplies a synthetic milk which is reported to be admirable in its quality.

Annual Meeting of Iowa Chapter

The annual meeting of the Iowa Chapter will be held at Ottumwa, Iowa, on October 24 and 25. An interesting programme is being prepared by the Committee in charge, and it is expected that the President of the Institute will attend and take part in the discussions.

A Partnership Change in Detroit

Preston, Brown & Walker, Architects, 849–851 David Whitney Building, Detroit, Mich., announce dissolution of partnership. J. Martin Brown and Martin A. Preston, having taken over all interests of the former firm, will continue the business at the same address under the name of Brown & Preston, Architects and Engineers. Mr. R. L. Walker, having withdrawn, will follow other activities for the present.

Book Reviews

The English Home from Charles I to George IV.

By J. Alfred Gotch, F.S.A., F.R.I.B.A. B. T. Batsford, London, 1918. Charles Scribner's Sons, New York City. $13.50.

This volume, as the author explains in the Preface, takes up the story of the house of the noblemen and aristocrats of England where it was left in a preceding volume on "Early Renaissance Architecture in England." It is an interesting story and of peculiar significance at a moment when the question of better houses for English workers is one of the great problems of the British Government. With that question, however, the work of Mr. Gotch has no relation whatever. His book is for the other professional man. In it there are developed many accounts architectural, with narratives of the professional careers of the architects who have left such a mark upon so large a part of the rural domestic architecture of England.

More than this, one catches a sweeping view of the architectural development of the home of England's "upper class," and perceives the action and reaction of those forces which first emancipated the home from its need of being a fortress as well, and then stimulated its enrichment and adornment, as well as its greater comfort and convenience. Thus we see that, coincident with the disappearance of the baronial retinue of fighting men and the development of government as a police power, England began to tap the wealth of the world. Her ships sailed upon every sea, and her merchants dealt with the products of every clime. Primogeniture and the law of entail were worshipped as the symbol of English solidity and respectability. The squire took his place in English literature, and, like others who had amassed wealth, would build him a new house, set in a spacious park. Great fortunes were made in trade, and greater ones in land, not only in the monopoly which has clung so persistently to English progress at home, but in the development of Colonial possessions.

The noblemen of England toured the world for their pleasure and enjoyment. The merchant went the same way on another errand. Both found much to admire in foreign parts, especially in Italy and France. Thus there began to drift across the Channel a small band of workmen who, invited by the returned travelers or by those who sought to meet their wishes in the building of a new house, were destined to greatly influence the architectural traditions of insular England—of that England which was even then setting out on the road to Empire.

Mr. Gotch traces all of this in different places throughout his work, but, in pondering upon this era of almost riotous expenditure, we are left to wonder whether it was not founded upon a system which would exact a terrible price when Watts and Stephenson and Hargraves were to throw open the doors for the centralization of industry. Under that system the gulf between the luxurious and the inhuman home was to widen until it threatened to swallow the whole.

These reflections seem almost out of place in the presence of so scholarly a work as that under discussion, and yet they are inescapable to whoever thinks as he reads. But the book is a real joy within its sphere, for it takes one rambling through a past when good taste, exquisite proportions, and simple dignity combined to give us an inheritance of such rural domestic architecture as is not to be found elsewhere in the world, a thing which is at once so pleasant to come upon with its park and its plantations, its gardens and tree-bordered drives, that one worships at the shrine and forgets the system upon which it was built and the dismal hovels on the other side of the gulf. But the whole obligation of architecture is yet to be fulfilled, and out of this precious past of real beauty we must find the means of obliterating the gulf which makes all our communities a general hodge-podge.

If one lays down the book with a sigh, one picks it up again because it is too enjoyable to leave. Mr. Gotch throws new light upon the lives of Webb, Wren, Jones, Vanbrugh, and discusses their works and their professional careers in an interesting manner. There are excursions into the collateral fields of craftmanship in all its forms. The illustrations have been selected with fine judgment and they greatly enhance the pleasure of reading. A useful appendix completes a book which cannot be ignored in assembling any library on domestic architecture. Its closing words are well worth bearing in mind: "Architecture, like other arts, is immortal; the qualities of proportion, ornament, and fitness can never long be disregarded, for no building is complete which is not beautiful to look upon."—B.

Obituary

John Gaisford

Elected to the Institute, 1915

Died at Memphis, Tenn., August 31, 1918

Mr. Gaisford was born in Warminster, England, in 1876. He there studied architecture and came to this country at the age of twenty. Seven years were spent in Pennsylvania, which he left to locate in Memphis where he has since been in practice. Mr. Gaisford was a citizen of the United States and was listed for service at the call of the Government. His brother, Mr. Harold Gaisford, was killed at the front in April of this year while serving with the British Army, while another brother also has been wounded in action.

Mr. Gaisford was the architect for a considerable number of churches throughout the South, as well as for numerous private residences in and about Memphis.

Structural Service Department

SULLIVAN W. JONES, *Associate Editor*

Special War Service

In connection with professional societies, organized bodies, and the following Committees of the Institute, working toward improvements in building materials and methods, and higher ideals in the sheltering of humanity:

BASIC BUILDING CODE	CONTRACTS AND SPECIFICATIONS	FIRE-PREVENTION
MATERIALS AND METHODS	STRUCTURAL SERVICE	QUANTITY SYSTEM

The personnel of these Committees for the ensuing year will appear next month

SPECIAL WAR SERVICE ISSUE

SERIAL NO. 9, SEPTEMBER, 1918

INDEX TO SUBJECTS TREATED IN THIS ISSUE

(For index of subjects previously treated, see Index on page 457 and consult the General Index in Structural Service Book, Vol. I. Serial numbers, whether light face or bold face, refer to the months of the year. Thus 1, light face, refers to the Journal for January, 1918; 1, bold face, refers to the corresponding section in the Structural Service Book.)

War Industries Board 9A
Priorities Division 9B
Materials Classifications 9C
Applications for Priority 9D
War Construction 9D1
Non-War Construction 9D2
Buildings Already Begun 9D3
Special Conditions Governing Production of Building Materials 9E
Iron and Steel 9E1
Brick, Hollow Tile, Cement, Lime 9E2
Allocation and Standardization 9F

THE war is making history in Structural Service faster than it has ever been made before and leaving little possibility for any orderly arrangement and classification at the present moment. It therefore seems wise to make a departure in the character of the material which has hitherto been published in this department and to endeavor to chronicle the developments and practices growing out of the governmental domination of the building industry of the present time, as made necessary by the demands of war.

These demands cover not only the practices in building construction that are everywhere developing methods and uses of materials not heretofore in common practice, but they also relate to the emphatic necessity for organizing every form of building material production, distribution, and use, in order that the resources of the country in these lines may be made to contribute their maximum to our war effort.

The work of the editors will therefore lie along lines of gathering and presenting such information as will enable our readers to gain the most comprehensive grasp of this gigantic work, in all its varying aspects, as well as in presenting such methods of practice, standardization, and new uses of materials as are likely to affect the building practice of the future. Among the developments which are so rapidly taking place, the problems of labor are among the first importance. Here is a field which may be said to come first in its effect on the building industry, for all building is primarily a labor problem. We are so accustomed to thinking of a building project in terms of the immediate labor needs of erection itself that we generally quite lose to sight the fact that almost every single step in the production of every kind of material has its own inherent problem of the workman. The war is forcing attention upon these manifold questions, which appear only as isolated factors in times of peace, and our whole system of production is undergoing a scrutiny as rigorous as are the stern demands of war. Our problem is being seen as one which depends for its solution on the skill with which we can mobilize our man-power, but the industrial

problem of the future will also depend for its solution upon the same answer. It is therefore a part of the task of architects to endeavor to study the effects of this war scrutiny and the changes produced thereby in order that they may later on be able to coöperate, in their work of designing and planning buildings, with such changes in the employment of labor as are found to be beneficial toward making all forms of production contribute their maximum to the common good.

One of the great difficulties encountered in all of this work lies in the fact that the public press devotes scarcely any space to the publication of news relating to the work of those governmental agencies which are charged with the tasks entering into the problems of building. This is perhaps due to no unwillingness of the press but more to a traditional attitude toward the subject itself—an attitude which leads newspaper editors to believe that the subject is of interest to so small a group as to make it unworthy of anything more than a brief reference. From this dearth of news, however, there has developed a considerable lack of information and many misunderstandings as to the wishes of the Government in regard to general building by individuals. The editors hope that this department may aid in correcting that lack of information, in order that more and more we may become familiar with all the aspects of this complicated problem.

The War Industries Board 9A

BERNARD M. BARUCH, *Chairman*

The War Industries Board was created to deal with the problem of industry in general, but the Structural Service Department of the Journal will naturally concern itself with those functions of the Board which relate specifically to building materials and construction.

The general functions of the War Industries Board are thoroughly explained in the letter of President Wilson of March 4, 1918, in which Mr. Bernard M. Baruch was asked to accept the Chairmanship of the Board. The letter is reprinted in full and is as follows:

THE WHITE HOUSE
Washington, March 4, 1918.

DEAR MR. BARUCH: I am writing to ask if you will not accept appointment as Chairman of the War Industries Board, and I am going to take the liberty at the same time of outlining the functions, the constitution, and action of the Board as I think they should now be established.

The functions of the Board should be—

(1) The creation of new facilities and the disclosing, if necessary the opening up, of new or additional sources of supply.

(2) The conversion of existing facilities, where necessary to new uses.

(3) The studious conservation of resources and facilities by scientific, commercial, and industrial economies.

(4) Advice to the several purchasing agencies of the Government with regard to the prices to be paid.

(5) The determination, wherever necessary, of priorities of production and of delivery and of the proportions of any given article to be made immediately accessible to the several purchasing agencies when the supply of that article is insufficient, either temporarily or permanently.

(6) The making of purchases for the Allies.

The Board should be constituted as at present and should retain, so far as necessary and so far as consistent with the character and purpose of the reorganization, its present advisory agencies; but the ultimate decision of all questions, *except the determination of prices*, should rest always with the Chairman, the other members acting in a coöperative and advisory capacity. The further organization of advice I will indicate below.

In the determination of priorities of production, when it is not possible to have the full supply of any article that is needed produced at once, the Chairman should be assisted, and so far as practical, guided by the present priorities organization or its equivalent.

In the determination of priorities of delivery, when they must be determined, he should be assisted when necessary, in addition to the present priorities organization, by the advice and coöperation of a committee constituted for the purpose and consisting of official representatives of the Food Administration, the Fuel Administration, the Railway Administration, the Shipping Board, and the War Trade Board, in order that when a priority of delivery has been determined there may be common, consistent, and concerted action to carry it into effect.

In the determination of prices the Chairman should be governed by the advice of a committee consisting, besides himself, of the members of the Board immediately charged with the study of raw materials and of manufactured products, of the labor member of the Board, of the Chairman of the Federal Trade Commission, the Chairman of the Tariff Commission, and the Fuel Administrator.

The Chairman should be constantly and systematically informed of all contracts, purchases, and deliveries, in order that he may have always before him a schematized analysis of the progress of business in the several supply divisions of the Government in all departments.

The duties of the Chairman are·

(1) To act for the joint and several benefit of all the supply departments of the Government.

(2) To let alone what is being successfully done and interfere as little as possible with the present normal processes of purchase and delivery in the several departments.

(3) To guide and assist wherever the need for guidance or assistance may be revealed; for example, in the allocation of contracts, in obtaining access to materials in any way preëmpted, or in disclosure of sources of supply;

(4) To determine what is to be done when there is any competitive or other conflict of interest between departments in the matter of supplies; for example, when there is not a sufficient immediate supply for all and there must be a decision as to priority of need or delivery, or when there is a competition for the same source of manufacture or supply, or when contracts have not been placed in such a way as to get advantage of the full productive capacity of the country;

(5) To see that contracts and deliveries are followed up to where such assistance as is indicated under (3) and (4) above has proved to be necessary.

(6) To anticipate the prospective needs of the several supply departments of the Government and their feasible adjustment to the industry of the country as far in advance as possible, in order that as definite an outlook and opportunity for planning as possible may be afforded the business men of the country.

In brief, he should act as the general eye of all supply departments in the field of industry.

Cordially and sincerely, yours,

(Signed) WOODROW WILSON

MR. BERNARD M. BARUCH.

Priorities Division 9B

JUDGE EDWIN B. PARKER, *Commissioner*

First, among the Divisions of the War Industries Board in importance to the building industry, is the Priorities Division, which deals with the question of any shortage of materials due to any cause. Such shortages, when ascertained, are discussed by the Priorities Board, which is a body composed of representatives of the Railroad Administration, the United States Navy, Labor Department, the United States Army, Allied Purchasing Committee, Fuel Administration, Food Administration, Emergency Fleet Corporation, and the War Trade Board. The Priorities Board discusses the shortage and its causes, and suggests such remedies as may be possible, either through readjustments of any kind or through the opening up of new facilities. Its directions for handling the shortage are then issued to the Priorities Committee, which is the administrative body in the Priorities Division.

On March 21, 1918, the following resolutions were promulgated by the War Industries Board:

Resolved by the War Industries Board, that in the public interest all new undertakings not essential to and not contributing either directly or indirectly toward winning the war, which involve the utilization of labor, material, and capital required in the production, supply, or distribution of direct or indirect war needs will be discouraged, notwithstanding they may be of local importance and of a character which should in normal times meet with every encouragement; and be it further

Resolved, That in fairness to those interested therein notice is hereby given that this Board will withhold from such projects priority assistance, without which new construction of the character mentioned will frequently be found impracticable, and that this notice shall be given wide publicity, that all parties interested in such undertakings may be fully apprised of the difficulties and delays to which they will be subjected and embark upon them at their peril.

The provisions of these resolutions are enforced through pledges secured from manufacturers, under which they agree

"not to use, nor so far as lies within its power permit to be used, any products of its manufacture now in, or which may hereafter come into, its possession or control, save (*a*) for essential uses as that term has been or may be defined or applied from time to time by the Priorities Division of the War Industries Board, or (*b*) under permits in writing signed by or under authority of such Priorities Division; that it will make no sale or delivery of such products to any customer for resale until such customer has filed with it a similar pledge in writing, and that it will use its utmost endeavor to insure that its products shall be distributed *solely* for essential uses."

Materials Classifications 9C

All materials are classified as to use and not as to the nature of the commodity itself. These classifications are as follows:

CLASS AA DEFINED

Class AA comprises only emergency war work of an exceptional and urgent nature.

CLASS A DEFINED

Class A comprises all other war work; that is to say, orders and work necessary to carry on the war, such as arms, ammunitions, destroyers, submarines, battleships, transports, merchant ships, and other water-craft, airplanes, locomotives, etc., and the materials or commodities required in the production or manufacture of same.

CLASS B DEFINED

Class B comprises orders and work which, while not *primarily* designed for the prosecution of the war, yet are of public interest and essential to the National welfare or otherwise of exceptional importance.

CLASS C DEFINED

Class C comprises all orders and work not covered by priority certificates issued by the Priorities Committee or not taking an automatic rating, in accordance with the provisions of Sections 7, 8, and 9 hereof, which orders and work are to be utilized in furtherance of one or more of the purposes embraced within the "General Classification of Purposes Demanding Preference Treatment" promulgated by the Priorities Board, appearing on page 17 of circular No. 4, as same may be from time to time amended or substituted; or which orders and work are placed by or are to be utilized in connection with an industry or plant appearing on Preference List No. 1, promulgated and published by the Priorities Board under date of April 6, 1918 (as set forth on pp. 18–19 of circular No. 4), and all amendments or substitutes therefor. No Class C certificates shall be issued.

CLASS D DEFINED

Class D comprises all orders and work not embraced in Class AA, Class A, Class B, or Class C, and no certificates will be issued therefor. All orders for work or materials not covered by priority certificates or not taking an automatic classification in accordance with the provisions of Sections* 8 and 9 (circular No. 4), hereof, and not taking a Class C classification under the provisions of Section 5 hereof, will fall within Class D.

The precedence of orders placed with producers under these various classes is automatically adjusted, A and its subdivisions taking place over B, and so on.

(NOTE.—It should be noted that at this time practically nothing but Class AA and A orders in steel and iron products are being filled by manufacturers.)

It should be clearly understood that the system under which priority is operated depends upon the voluntary pledge of manufacturers, the form of which appears above. Each manufacturer who executes this pledge with the Government is also bound to exact a similar pledge from every other customer or buyer with whom he deals. The jobber or wholesaler is also included in this system. He gives a pledge to the manufacturer from whom he buys that he will not sell the materials obtained except for uses which fall within the class or classes to which production is at that time confined. The retailer must also give a similar pledge to the jobber, and, in his turn, must exact a similar pledge from the ultimate consumer. Thus it will be seen that the whole system depends for its observance upon the honor and good faith of all concerned.

*Section 8 deals with general materials and appliances which are only very indirectly related in a few cases to the building industry; Section 9 provides for that automatic classification under Class C, providing that the intending user has filed the pledge referred to above and declared that the materials required will be used for no other purpose described under that classification.

Applications for Priority 9D

It is the ultimate consumer who must in all cases make application for a priority certificate to cover his order.

9D1 WAR CONSTRUCTION. On emergency war construction, orders duly authorized by an officer of the War Department, the Navy Department, or of the Emergency Fleet Corporation, which fall within Class A, require no priority certificate and automatically take precedence over all orders and work of a lower classification to the extent necessary to insure delivery according to the date specified.

On every other class of order a priority certificate is required and application therefor must be made to the Priorities Committee of the War Industries Board upon blanks provided for the purpose, which may be secured on application, either personally or by mail.

9D2 NON-WAR CONSTRUCTION. The method of application is duly set forth in the following instruction of the War Industries Board:

Should one contemplating building conceive his proposed project to be in the public interest or of such essentiality that under existing conditions it should not be deferred, then he will make a full statement of the facts in writing, under oath, and present same to the local representative of the Council of National Defense, applying to such representative for his approval of the proposed construction. Should such local representative approve the construction project, he will promptly transmit the application, stating clearly and fully his reason for approving same, to the Chairman of the State Council of Defense, for his consideration. If approved by the latter, he will transmit it to the Chief of the Non-War Construction Section of the Priorities Division of the War Industries Board, Washington, D. C., for consideration, if need be further investigation, and final decision. Should the application be finally approved by the Priorities Division a construction permit will issue which will constitute a warrant to manufacturers and dealers who have taken the pledges of coöperation above mentioned to sell and deliver building materials required in the construction of the licensed building project. (Circular No. 21.)

9D3 BUILDINGS ALREADY BEGUN. "Where a substantial portion of a building has already been constructed, manufacturers and distributors of and dealers in building materials may continue to furnish such materials for the completion of such building, pending further

action by the War Industries Board. The local representatives of the Council of National Defense are requested to make surveys of all building activities in their respective territories and report same as promptly as possible to their State Chairmen, together with their recommendations concerning the necessity for the continuance of such construction or deferring same until after the war. The State Chairmen will in turn forward such reports, with their recommendations, to D. R. McLennan, Chief of the Non-War Construction Section of the Priorities Division of the War Industries Board, Washington, D. C."

(NOTE.—The Rules and Regulations Governing Priority in Production are published in Circular No. 4 issued by the Priorities Division of the War Industries Board.)

Special Conditions Governing Production of Building Materials 9E

Iron and Steel 9E1

For the winning of the war steel is now the world's most precious metal. It is consumed, or used to some extent, every day by practically every civilized man in every civilized country, and nowhere in such vast quantities per capita as in the United States. The present and constantly increasing steel requirements of this country and its Allies for direct and indirect war needs, 100 per cent of which must under any and all circumstances be promptly supplied, are so enormous as to well-nigh absorb our constantly expanding producing capacity. The result is obvious. There will be comparatively little iron and steel left to distribute to those industries engaged in non-war work and to consumers for application to non-war uses. Every possible use of iron and steel or their products which can be deferred must be deferred until after the war. This duty is *personal* and can not be avoided or delegated to your friends and neighbors. No consumption is so small as to be immaterial, and no saving insignificant.

It is imperative that every manufacturer, jobber, and retailer of iron and steel products should fully realize and make his salesmen and customers realize that his attitude toward his trade is exactly the reverse of that in normal times. It requires no salesmanship merely to sell goods where the demand greatly exceeds the supply, but it does require real salesmanship and a high degree of patriotism to sell with discrimination with a view of limiting the purchases to strictly essential uses, the controlling consideration being, Where can these stocks be best placed in the public interest?—*Circular No. 5, Priorities Division, War Industries Board.*

It will thus be observed that this shortage in steel creates a shortage in innumerable essential building materials, from structural steel to roofing tin, including a host of smaller products, the conservation of which manifestly becomes a National duty.

Paving Brick, Face Brick, and Common Brick. Hollow Building Tile. Cement. Lime 9E2

The production of these materials has been curtailed, due to no shortage in raw materials but to a shortage in fuel, the consumption of which is a large item in their manufacture. The War Industries Board has held consultations with the representatives of these industries and has established a method of application for preference in fuel allotments, governing the amounts which these industries will be permitted to produce to meet the needs of essential war construction or use. This condition sets up the problem of an equitable distribution among the various plants in each industry, a problem which is being solved by the War Service Committees of the respective industries in consultation with the War Industries Board. Involved in a consideration of this question are many factors, such as the location of the plant with reference to source of supply of fuel and raw materials, and destination of product.

Allocation and Standardization 9F

There must also be considered questions of allocation of materials and the necessity for agreeing, wherever possible, upon such standardizations as will effect the maximum economy of labor, fuel, and materials. Such problems fall within the domain of the Building Materials Section of the War Industries Board, and these, together with other functions of that body relating to the building industry, will be treated in the next issue of the Journal.

General Index to Structural Service Department

Light-face numerals refer to information published in the Journal during 1918. Black-face serials refer to the Structural Service Book, Volume I, a copy of which is in the possession of every architect, engineer, builder, or manufacturer who subscribes to the Journal.

Acoustics. Serials 11, 12 Page
Johns-Manville Co., H. W. xv
Administration (General and Office). 1B
Asbestos Products. Serials 3, 10, 11
Johns-Manville Co., H. W. xv
Automatic Sprinklers. Serial 4
Billiard Tables and Bowling Alleys. 4F. **Serial 5**
Blinds (Light-diffusing).
Wilson Corporation, The J. G. . . . xxv
Boilers. Serial 10
Smith Co., The H. B. v
Branding and Trademarking of Timber and Lumber. 4B5. **Serial 5**
Brick. 3H. **Serials 2, 3**
Broken Stone. 2D. **Serial 2**
Cast Stone. 2B12. **Serial 11**
Cement and Concrete. 2B. **Serial 2**
Atlas Portland Cement Co., The . . xiii
Chutes (Laundry). Serials 4–9
Pfaudler Co., The xxvii
Composition Flooring. Serial 11
Barrett Company, The vii
Conduits. 6D. **Serial 6**
National Metal Molding Co. xxvi
Contractual Relations. 1C
Cork Flooring.
Kennedy, Inc., David E. xxviii
Corrosion and Treatment of Metals. Serial 1
Damp-Proofing. 1F. **Serial 1**
Doors (Metal). 5F. **Serials 4, 11**
Merchant & Evans Co. xxi
Wilson Corporation, The J. G. . . . xxv
Doors (Wood). 4E2. **Serial 5**
Curtis Companies, The x
Electrical Fittings and Supplies. 6. **Serial 6**
National Metal Molding Co. xxvi
Electrolysis. 6L. **Serial 6**
Engineering Service. 1A
Corrugated Bar Co. xxiv
Estimation. 1D
Quantity Survey Co., The . . . 4th Cover
Corrugated Bar Co. xxiv
Excavation. 1E
Filters. Serial 9
Loomis-Manning Filter Distributing Co. xii
Fittings (Steam, Plumbing, Gas). Serial 9
Crane Co. xvi
Flooring (Cork).
Kennedy, Inc., David E. xxviii
Flooring (Wood). 4E4. **Serial 5**
Floor Hardener.
Sonneborn Sons, Inc., L. . . . . 3d Cover
Foundational Requirements, Concrete Piling, Steel Piling. 1E. **Serial 1**
Gas Appliances. Serial 7
Humphrey Company xix
Glass (Wire). 5E. **Serial 4**
Mississippi Wire Glass Co. xxvii
Granite. 3C. **Serial 2**
Greenhouses. Serial 12
Lord & Burnham Co. xii
Gypsum. 5E. **Serial 4**
Hollow Tile. 3H. **Serial 3**
Incinerators. Serial 7
Buck's Stove and Range Co., The . . iv
Inspection Service. 1A Page
Underwriters' Laboratories xxiii
Insulations. Serials 8, 10
Barrett Company, The vii
Certain-teed Products Corporation . xxii
Johns-Manville Co., H. W. xv
Interior Finish (Wood). 4E2. **Serial 5**
Curtis Companies, The x
Southern Pine Association ix
Laboratories (Testing and Research). 1A. **Serials 1, 3**
Underwriters' Laboratories xxiii
Lath (Metal). 5E. **Serials 3, 4**
Associated Metal Lath Mfrs. viii
Berger Mfg. Co., The xxi
General Fireproofing Co., The . . . xx
Lath (Wood). 4E3. **Serial 5**
Bishopric Manufacturing Co. iii
Laundry Chutes. Serial 9
Pfaudler Co., The xxvii
Lighting Fixtures and Lamps. 6J. **Serials 6, 7**
Light Diffusion.
Wilson Corporation, The J. G. . . . xxv
Lime and Hydrated Lime. 2C. **Serial 2**
Limestone. 3B. **Serial 2**
Lumber. 4B. **Serial 5**
Curtis Companies, The x
Southern Pine Association ix
White Pine Bureau xxx
Magnesia Covering. Serials 4, 10
Johns-Manville Co., H. W. xv
Marble. 3D. **Serial 2**
Metal Lath. 5E. **Serials 3, 4**
Associated Metal Lath Mfrs. viii
Berger Mfg. Co., The xxi
General Fireproofing Co., The . . . xx
Mill Construction. 4E. **Serial 5**
Southern Pine Association ix
Monuments and Mausoleums. Serial 2
Paints (Steel and Iron Preservative.) Serial 1
Barrett Company, The vii
Paints, Varnish and Enamel. Serial 12
Certain-teed Products Corporation . xxii
Barrett Company, The vii
Matheson Lead Co. xxix
Paints (Waterproofing). 1F. **Serial 1**
Parquetry Work. 4E4. **Serial 5**
Piling (Concrete). 1E. **Serial 1**
Piling, Piers and Bulkheads. 4D.
Pipe (Cast Iron). Serial 9
Cast Iron Soil Pipe Makers' Association xiv
Pipe (Wrought Iron). 5A. **Serials 7, 9**
Byers Co., A. M. vi
Plumbing Equipment. Serial 9
Crane Co. xvi
Kohler Co. xxix
Standard Sanitary Mfg. Co. xvii
Preservation of Iron and Steel. 1G9. **Serial 1**
Barrett Company, The vii
Preliminary Procedure. 1B
Quantity Survey. 1D
Quantity Survey Co., The . . . 4th Cover
Radiators (Steam). Serial 10
Smith Co., The H. B. v
Research. 1A. **Serial 1**
Underwriters' Laboratories xxiii
Roofing. 5E. **Serials 2, 4** Page
American Sheet and Tin Plate Co. . . xii
Barrett Company, The vii
Certain-teed Products Corporation . xxii
Johns-Manville Co., H. W. xv
Taylor Co., N. & G. xviii
Merchant & Evans Co. xxi
Safety Devices. 5F. **Serials 4, 9**
American Abrasive Metals Co. . 2d Cover
Sandstone. 3E. **Serial 2**
Sash (Steel). 5E. **Serials 4, 11**
Sheet Metal Cornices, Skylights, Ventilators. 5E. **Serials 4, 11**
Shingles (Wood). 4E3. **Serial 5**
Shutters (Rolling Steel). 5F. **Serials 4, 11**
Wilson Corporation, The J. G. . . . xxv
Slate. 3G. **Serial 2**
Soapstone. 3F. **Serial 2**
Specifications and Drawings. 1C
Stains, Shingle. Serials 5, 12
Barrett Company, The vii
Cabot, Inc., Samuel xxvi
Stair Treads. Serial 4
American Abrasive Metals Co. . 2d Cover
Standardization. 1A
Stone Masonry, Broken Stone, Sand, and Gravel. 2D. **Serial 2**
Stoves. Ranges. Serials 6, 7, 9
Buck's Stove and Range Co., The . . iv
Structural Steel and Iron. 1G. **Serial 1**
Stucco. Serials 3, 11
American Materials Co. xxvi
Atlas Portland Cement Co. xiii
Stucco Board.
Bishopric Manufacturing Co., The . iii
Telephone Signal Systems. 6F. **Serial 6**
Terra Cotta. 3H. **Serial 3**
Tests. 1A
The National Electrical Code. 6B
The National Electrical Safety Code. 6C
Timber (Standing) and Manufactured Lumber. 4B. **Serial 5**
Tin Roofing. 5E. **Serials 4, 11**
American Sheet and Tin Plate Co. . . xii
Merchant & Evans Co. xxi
Taylor Co., N. & G. xviii
Treatment of Concrete Floors and Surfaces. 2B. **Serials 1, 11**
Sonneborn Sons, Inc., L. . . . . 3d Cover
Treatment of Woods. 4C. **Serial 5**
U.S. Geological Survey. 2A. **Serials 1, 2**
Varnish. Serial 12
Barrett Company, The vii
Certain-teed Products Corporation . xxii
Ventilation. Serial 9
Ohio Blower Co., The xi
Water-Heaters (Gas). Serial 7
Humphrey Company xix
Waterproofing. 1F. **Serial 1**
Barrett Company, The vii
Whitewash (Gov't Formulas). 2C5. **Serial 2**
Windows (Metal). 5E. **Serials 4, 11**
Windows (Wood). 4E2. **Serial 5**
Curtis Companies, The x
Wire Glass. 5E. **Serials 3, 4**
Mississippi Wire Glass Co. xxvii
Wood. 4B. **Serial 5**
Curtis Companies, The x
Southern Pine Association ix
White Pine Bureau xxx

Classified Index to Industrial Section

Page
American Materials Co., Inc. xv
American Radiator Company xi
American Sheet and Tin Plate Co. . . xvii
Associated Tile Manufacturers, The . . xxiii
Atlas Portland Cement Co., The . . . xxvi
Berger Manufacturing Co., The . . . xxii
Bishopric Manufacturing Co., The . . iii
Cabot, Inc., Samuel xviii
Cast Iron Soil Pipe Makers' Association . xxv
Corrugated Bar Co. xix
Curtis Companies, The ix
General Electric Company iv
Page
General Fireproofing Company, The . . xxi
Heinigke & Smith xv
Humphrey Company xxiv
Johns-Manville Co., H. W. v
Kennedy, Inc., David E. xiii
Loomis-Manning Filter Distributing Co. xviii
Magnesia Association of America . . . vii
Matheson Lead Co. xx
Merchant & Evans Co. xxii
Mississippi Wire Glass Co. xviii
Murphy Varnish Company xv
Page
National Metal Molding Co. xvii
Pfaudler Co., The xx
Presbrey-Coykendall Co. xiv
Quantity Survey Co., The . . . . 4th Cover
Smith Co., The H. B. vi
Sonneborn Sons Co., L. . . . . 3d Cover
Southern Pine Association xii
Taylor Co., N. & G. xiv
Webb Pink Granite Co. x
White Pine Bureau . . . . . 2d Cover
Wilson Corporation, The J. G. xvi

"As a Man Liveth"

is the title of a new book just published by the metal lath industry. This book* is dedicated to leaders of American Industry and individuals interested in Industrial Housing. Varied detailed information is given bearing on the construction of permanent, practical, firesafe and economical houses for workmen, utilizing metal lath for the stucco exterior and for the interior wall and ceiling plastering base. The book is fully illustrated with photographs, sketches and plans of houses now in use, and also contains digests of schemes for construction now being used by several well-known Architects and Town Planners.

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